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Table 4
Xon Probes Express

Table 4
Single Exon Probes Expressed In Heart

Probe Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Single Exon Probes Expressed in Heart	
					Top Hit Database Source	Top Hit Descriptor
3032	124960	227763	1.16	1.0E-12	AEU05981.1	INT
3798	13710	23466	27.7	1.0E-12	ENST00000242481	EST_HUMAN
3798	13710	23467	27.7	1.0E-12	AL01422461	EST_HUMAN
56292	15544	29502	1.73	1.0E-12	U02828.1	INT
6224	16690	26240	1.82	1.0E-12	Q0772937	SWISSPROT
6240	15106	26256	1.72	1.0E-12	ENR0984.1	NT
6240	15106	26257	9.11	1.0E-12	AI246833.1	EST_HUMAN
6240	16106	26257	9.11	1.0E-12	AI246833.1	EST_HUMAN
7051	16528	27119	1.31	1.0E-12	AA762323.1	EST_HUMAN
9085	18850	29118	3.85	1.0E-12	AW02164.1	EST_HUMAN
9095	17728	29120	2.2	1.0E-12	AB048356	SWISSPROT
9093	11420	27124	2.72	1.0E-12	AB05949.1	NT
3575	19415	21785	1.13	1.0E-12	AB071785.1	NT
3895	17776	23570	1.16	9.0E-15	AB028500.1	EST_HUMAN
7557	17388	20453	2.37	9.0E-15	AB06653.1	EST_HUMAN
700	10533	20458	5.05	9.0E-15	U29185.1	EST_HUMAN
700	10533	20459	5.05	9.0E-15	U29185.1	EST_HUMAN
1766	11694	21670	1.36	8.0E-13	U80017.1	NT
7388	17688	213	8.0E-13	U78027.1	NT	Homo sapiens basic transcription factor 2 (BTF2) gene, partial cds; neuronal lipoprotein inhibitor protein (NIP), and taurine methyl esterase (TME) genes; complete cds
86841	18788	25078	2.49	8.0E-06	U68060.1	NT
6550	19149	25078	10.33	7.0E-13	U776223.1	EST_HUMAN
9788	16287	21840	1.33	7.0E-13	Q10173	SWISSPROT
2054	11944	21840	12.51	6.0E-13	AI183207.2	NT

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3260	13201		1.05	5.0E-13	R76336..1	EST_HUMAN	W62041.1 Shows placenta Nis2HP Homo sapiens cDNA clone IMAGE:145769_5'	
3361	13271		1.45	5.0E-13	AA485781.1	EST_HUMAN	27742.1 Shows testis, Nt-Homo sapiens cDNA clone IMAGE:28595_3' similar to contains Alu repetitive element containing a element NEP22 repetitive element;	
8234	16115		2.93E-07	6.0E-13	PT07313	SWISSPROT	P1024-T0724-227009_001-H170224_Homo sapiens cDNA	
1242	11721		2.94E	4.0E-13	AW078614.1	EST_HUMAN	Hom sapiens giphan 3 (GIPCs) genes, partial cds and flanking repeat long cns	
2411	122288		1.58	4.0E-13	AF098429.1	NT	Hom sapiens mRNA for KIAA1329 protein; partial cds	
5430	16330		2.54E-04	4.0E-13	BE165131.1	EST_HUMAN	P104-T0526-2205-H102205_Homo sapiens cDNA	
6075	18142		1.92	4.0E-13	AB077501.1	NT	Hom sapiens mRNA for KIAA1329 protein; partial cds	
8542	18400		1.52	4.0E-13	NA442061.1	EST_HUMAN	Y62905_1 Shows melanocyte 2R0H11 Homo sapiens cDNA clone IMAGE:273680_5' similar to P104-A22061	
7757	17607		2.78E-03	4.57	4.0E-13	AA298981.1	EST_HUMAN	Q13206_1,X1 Proteins testis sterility protein - mouse ; repetitive element
8507	18379		2.86E-05	1.53	4.0E-13	AA458519.1	EST_HUMAN	Z2785_0.51 Shows testis, Nt-Homo sapiens cDNA clone IMAGE:728614_3
8507	18379		2.86E-05	1.83	4.0E-13	AA458519.1	EST_HUMAN	Hom sapiens X-linked arachidonic acid esterolytic dipeptidase protein gene (EPA), exon 2 and flanking repeat regions
173	10144		3.8	10.0E-13	AB009528.1	NT	Z20108_1 Shows testis, Nt-Homo sapiens cDNA clone IMAGE:78146_5'	
847	10774		1.37	2.0E-13	AA490310.1	EST_HUMAN	Hom sapiens Xg peptidase/lysosomal region segment 21 fragment H22	
2319	12200		2.20E-09	1.25	3.0E-13	AJ271798.1	NT	
2429	12398		2.03	4.2E-13	AB165210.2	NT	Hom sapiens chromosome 21 fragment H22/CD10	
2620	12467		2.23E-07	4.23	3.0E-13	BF3720622.1	EST_HUMAN	Q105-F008_1449705242-R05_Homo sapiens cDNA clone IMAGE:1324095_3'
3150	13075		2.86	3.0E-13	AA748984.1	EST_HUMAN	Hom sapiens c28e region near ALD locus containing dual specificity phosphatases 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CaMKI), creatine transporter (CRTT), CD4 protein (CD4), adenylylcyclase-activating polypeptide receptor >	
6801	16491		5.92	3.0E-13	UZ21112	NT	Hom sapiens cDNA library Homo sapiens cDNA clone IMAGE:610261-031198-067_4c03 B11281_Homo sapiens cDNA	
8054	17855		4.03	3.0E-13	AB054768.1	EST_HUMAN	HA0538_Human fetal liver cDNA	
8403	18279		3.68	3.0E-13	BE095690.1	EST_HUMAN	C10-B10261-031198-067_4c03 B11281_Homo sapiens cDNA	
8870	18683		2.6	3.0E-13	AL163248.2	NT	Hom sapiens chromosome 21 fragment H22/CD48	
144	10118		1.95E-08	2.77	2.0E-13	UZ21112	Hom sapiens c28c region near ALD locus containing dual specificity phosphatases 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CaMKI), creatine transporter (CRTT), CD4 protein (CD4), adenylylcyclase-activating polypeptide receptor >	
239	10207		2.00E-04	1.31	2.0E-13	UZ28389.1	NT	
1249	11156		2.10E-05	4.71	2.0E-13	AF280701.1	Dihydro folate reductase growth factor receptor 4 mRNA, complete cds	
3244	13167		2.99E-05	1.08	2.0E-13	B3-61889.1	Hom sapiens DNA polymerase delta small subunit (POLD2) gene, exons 1 through 11 and complete cds IMAGE:160105_1 Shows fibroblast F8_9W OT_PAP_S, Homo sapiens cDNA clone IMAGE: 3	

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal Value	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4019	13223		1.72	2.0E-13	AL165278.2	NT	Homo sapiens chromosome 21 segment HS2:1078
572	4920	-	2.87	2.0E-13	CD6882	SWISSPROT	CELL SURFACE GLYCOPROTEIN PRECURSOR (OUTER LAYER PROTEIN B) SLAYER PROTEIN 1
6078	16051	26209	6.32	2.0E-13	X16912.1	NT	Hank PKC gene for liver-type C-phosphotidylserine esterase [EC:2.7.1.1] exon 2
7978	77026	28057	3.97	2.0E-13	5031860	EST_HUMAN	Connexin 32B-21 (C. elegans)-like 1 (NM_00211) mRNA
9251	18051	10252	7.42	1.0E-13	AV08902565.1	NT	FGF-1-like fibroblast growth factor 1 [Human,狗鱼,金枪鱼] IMAGE:34211, segment 2 of 2
285	10252	20072	1.37	1.0E-13	ST4129.1	NT	Homo sapiens t (G)125 gene
670	10726	20946	4.39	1.0E-13	A0019673.1	NT	H. sapiens DNA DMB, HLA-C1, IP22, LMP2, TAP1, LMP1, TAP2, DOB, DOB2 and RIN36, 9, 13 and 14 genes
1314	11220	21077	1.27	1.0E-13	X87344.1	NT	mv21g02.s1 INCI CGAP_Gebo Homo sapiens cDNA clone IMAGE:1241158 3' similar to contains THR 13 THIR repetitive element
1976	11889	21761	2.16	1.0E-13	AA72057.4	EST_HUMAN	mv2038009f.s1 INCI CGAP_Bim84 Homo sapiens cDNA clone IMAGE:4195556 5'
4468	14832	24189	1.48	1.0E-13	BF3469867.1	EST_HUMAN	TA8910X_78_8W_1OT_P_5' Homo sapiens cDNA clone IMAGE:524443 3' similar to
8854	18572	28955	13.83	1.0E-13	BF108705.1	EST_HUMAN	contains MER23.22 MER23 repetitive element; AV175877_DCB8 Homo sapiens cDNA clone DCBAIEC3 5'
9076	18853		1.62	1.0E-13	AV771637.1	EST_HUMAN	Homo sapiens Xq pseudoutrachidial region, segment 12
9714	19255		1.6	1.0E-13	AJ271735.1	NT	#12601.s1 Scores..Results..NTT Homo sapiens cDNA clone 13912323 3' similar to contains MER19.11 MER19 repetitive element
340	10289	20105	2.92	8.0E-14	AA781159.1	EST_HUMAN	#12601.s1 Scores..Results..NTT Homo sapiens cDNA clone 13912323 3' similar to contains MER19.11 MER19 repetitive element
331	10290	20108	2.85	8.0E-14	AA781159.1	EST_HUMAN	#12601.s1 Scores..Results..NTT Homo sapiens cDNA clone 13912323 3' similar to contains MER19.11 MER19 repetitive element
2451	12228		4.04	8.0E-14	AV188157.1	EST_HUMAN	RC4-L-10322-680104-03-d09 C10322 Homo sapiens cDNA
2725	12867	22482	4.62	9.0E-14	AB038182.1	NT	Homo sapiens FGF gene cluster for trichofiedder, complete cds
3073	13000	22790	3.74	9.0E-14	AV513595.1	EST_HUMAN	yes5-f05.s1 INCI CGAP_JH Homo sapiens cDNA clone IMAGE:2707835 3'
3200	10289	20105	0.98	9.0E-14	AA781159.1	EST_HUMAN	#12601.s1 Scores..Results..NTT Homo sapiens cDNA clone 13912323 3' similar to contains MER19.11 MER19 repetitive element
3728	13840	23426	5.22	9.0E-14	D14587.1	NT	Human DNA_SINE repetitive element
4480	14536	24325	1.93	9.0E-14	AA781159.1	EST_HUMAN	Sapaglins codisops genes for seminal vesicle secreted protein, semenogelin 1
3445	13859	13859	1.57	8.0E-14	BIG462683.1	EST_HUMAN	b27-cr05.s1 INCI CGAP_L-124 Homo sapiens cDNA clone IMAGE:3213624 3'
3872	13783		2.77	8.0E-14	R78269.1	EST_HUMAN	#12601.s1 Scores..placenta NB24P Homo sapiens cDNA clone IMAGE:144798 3'
7454	16447	28537	60.60	8.0E-14	X88211.1	NT	H. sapiens DNA for endogenous retrovirus 597202
7515	17003	27510	3.49	8.0E-14	AA203616.1	EST_HUMAN	#12710.10.51 Strategene fetal fetal cell line
8732	18558		4.39	8.0E-14	BE0262568.1	EST_HUMAN	QV2-B10286-261009-A1-e01 B10286 Homo sapiens cDNA clone IMAGE:6239970 3'

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267670x1 NC_004905_Cat4_Homo sapiens cDNA clone IMAGE:2283746 3' similar to contains MER1012							
1611	126869			3.07	7E-14 AW151073.1	EST_HUMAN	MER10 repetitive element;
363	10319	20140		10.2	6E-14 AF026053.1	INT	Homo sapiens FRASB common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
5114	14652	24765		1.02	8E-14 EG2549	INT	Homo sapiens hypothetical protein FLJ20585 (FLJ20585), mRNA
5114	14652	24757		1.02	6E-14 EG2546	INT	Homo sapiens hypothetical protein FLJ20585 (FLJ20585), mRNA
7852	17952	27728		2.65	6E-14 AF026053.1	INT	Homo sapiens FRASB common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
7852	17952	27728		2.66	6E-14 AF026053.1	INT	Homo sapiens FRASB common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
602	10558	20348		3.22	5E-14 CS3120	SWISSPROT	CANALICULAR NUTRICEPTIVE ORGANIC ANION TRANSPORTER 1 (MUTLIDRUG RESISTANCE PROTEIN)
4985	14890	24260		1.09	6E-14 AW073791.1	EST_HUMAN	NP_003053.x1 NC1_GAPU_ GuI1 Homo sapiens cDNA clone IMAGE:2267165 3' similar to contains L1 L1 repetitive element;
5397	18316	25353		6.12	5E-14 PR08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
1107	12625			1.77	4E-14 PR0425	SWISSPROT	S-ANTIGEN PROTEIN PRECURSOR
1635	11722	21659		6.5	4E-14 AA079723.1	INT	Homo sapiens GAD38 gene
13607				0.94	4E-14 AD065022.1	EST_HUMAN	NP_000746.x1 Scares, multiple, scarring, scabs; 2bHMSP Homo sapiens cDNA clone IMAGE:2717610 3' similar to contains L1 L1 repetitive element;
4194	14084	23873		1	4E-14 NR06252.1	EST_HUMAN	NP_000746.x1 NCI_OGA_P_UH Homo sapiens cDNA clone IMAGE:24545532 3' similar to contains MER432 repetitive element;
9177	18750			2.31	4E-14 AB08224.1	EST_HUMAN	NP_000746.x1 NCI_OGA_P_UH Homo sapiens cDNA clone IMAGE:24545532 3' similar to contains MER432 repetitive element;
934	10859	20775		2.13	3E-14 X05635.1	NT	PRIONOPATHY mRNA for CPBP2 protein
4841	14722	24058		0.32	3E-14 AW269354.1	EST_HUMAN	NP_06172.x1 NCI_OGA_P_JAN1 Homo sapiens cDNA clone IMAGE:2743343 3' similar to contains Aliu repetitive element; contains element MER40 repetitive element;
4844	14725	24537		1.1	3E-14 7686854	NT	Homo sapiens X1 pseudouridine/uracil region; 2bHMSP Homo sapiens A (fusiform) and methyleproteinase domain 29 (ADAM29) mRNA
5104	14872			1.23	3E-14 BR460722.1	EST_HUMAN	NP_06172.x1 NCI_OGA_P_JAN1 Homo sapiens cDNA clone IMAGE:3195861 3' similar to contains MER432 repetitive element;
6157	15024	24791		1.5	3E-14 P12254	SWISSPROT	REGULATORY PROZOTONE PROTEIN DISORDERER
6563	10331	24505		7.59	3E-14 AW269354.1	EST_HUMAN	NP_06172.x1 NCI_OGA_P_JAN1 Homo sapiens cDNA clone IMAGE:2743343 3' similar to contains Aliu repetitive element; contains element MER40 repetitive element;
384	10231	20155		3.98	2E-14 AJ271735.1	NT	Homo sapiens X1 pseudouridine/uracil region; Segment 2/2
384	10231	20155		3.98	2E-14 AJ271735.1	NT	Homo sapiens X1 pseudouridine/uracil region; Segment 2/2
676	10249	20240		6.32	2E-14 AJ271735.1	NT	Homo sapiens X1 pseudouridine/uracil region; Segment 2/2

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2359 12219	12203	1.09	2.0E-14	AW312868.1	EST HUMAN	RGSC-BT0377-001296-001-D12 BT0377 Homo sapiens cDNA		
2479 12356	22246	1.24	2.0E-14	AL163209.2	NT	Homo sapiens chromosome 21 segment Hs21C009		
2640 12507	22507	0.95	1.0E-14	P019548	NT	SWISSPROT		
65015 15423	25485	2.96	2.0E-14	U01371.1	NT	Human beta globin: region on chromosome 11		
6114 15008	16223	2.19	2.0E-14	BC020307-001-406	BC020307 Homo sapiens cDNA			
6452 16223	26454	19.91	2.0E-14	HE507804.1	EST HUMAN	L2-ATM0397-07-286-024-H T03971 Homo sapiens cDNA		
8160 18048	28500	4.97	2.0E-14	HE50781.1	EST HUMAN	L2-ATM0397-07-286-024-H T03971 Homo sapiens cDNA		
8791 15223	25485	1.81	2.0E-14	AK19800.1	EST HUMAN	Human beta globin: region on chromosome 11		
1051 10558	23810	1.31	1.0E-14	AL163246.2	NT	Homo sapiens chromosome 21 segment Hs21C046		
1384 11298	21143	7.67	1.0E-14	AL163288.2	NT	Homo sapiens chromosome 21 segment Hs21C058		
1384 11299	21144	7.67	1.0E-14	AL163288.2	NT	Homo sapiens chromosome 21 segment Hs21C058		
1668 11851	21738	21.64	1.0E-14	L41140.1	NT	(GAPD) gene, complete cds s.		
2157 12025	21921	0.17	1.0E-14	AL163303.2	NT	Homo sapiens chromosome 21 segment Hs21C103		
2359 12295	22134	6.43	1.0E-14	AF001689.2	NT	Homo sapiens ribosomal protein L2A (RPL2A) gene, complete cds		
2314 12841	22541	1.38	0.0E-14	P02257	SWISSPROT	HISTIDINE RICH PROTEIN PRECURSOR (CLONE PHHR-1)		
3130 13055	22854	4.67	0.0E-14	BF353227.1	EST HUMAN	RC3D7043-2 (T07403-3) 399... CTO432 Homo sapiens cDNA		
3130 13055	27855	4.67	0.0E-14	BF353227.1	EST HUMAN	RC2-C7043-3 (T07403-3) 409... CTO432 Homo sapiens cDNA		
3811 13123	23512	2	0.0E-14	AA682094.1	EST HUMAN	asfsc2.251 Homo sapiens cDNA clone MAGE_971350_3		
4374 14270	24051	1.74	0.0E-14	AM279552.1	EST HUMAN	asf39.0.21 NC_ C04P_Lu28 Homo sapiens cDNA clone MAGE_279559_3		
6590 15468	25539	1.97	0.0E-14	AF21645.1	NT	Bos taurus xenodermochalin-chain ester acid/C15-gase form X-LIII mRNA, nuclear mRNA encoding fibronectin protein, complete cds		
60112 19457	20045	10.41	1.0E-14	11437150 NT	NT	Homo sapiens prymulin (mouse)-like 1 (PRML1). mRNA		
60112 19457	28045	10.41	1.0E-14	11437150 NT	NT	Homo sapiens prymulin (mouse)-like 1 (PRML1). mRNA		
1558 11463	21320	2.85	0.0E-15	74276522 NT	EST HUMAN	Homo sapiens transcription factor GATA enhancer 3, M111 protein, M14 protein, M15 protein, T54 protein, T56 protein, T57 protein, T58 protein, T59 protein, T60 protein, 44 differentiation-dependent protein, Igfb1 Lm domain protein C, and synaptophysin genes, complete cds, and type calcium channel ap		
2126 12014	23449	1.54	0.0E-15	AF198779.1	NT	SWISSPROT	INTERPROTEIN CONTAINS: receptor proteins P15, P17, P50, P10	
6427 16288	23449	1.53	0.0E-15	BE505565.1	EST HUMAN	6016777509-1 NR_ NC_ 19 Homo sapiens cDNA clone IMAGE_3164023_5		
6673 16553	28748	1	0.0E-15	DE261492.1	EST HUMAN	6011446852-1 NR_ NC_ 19 Homo sapiens cDNA clone IMAGE_3164023_5		
2780 10415								

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xm770d2c-1 Scores: NF1_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2700463 3' similar to containe							
7683 17813				2.83	7.0E-15 AW241958.1	EST HUMAN	TIFR12/TIFR repetitive element.
978 10901	20716			6.12	6.0E-15 AL077786.1	EST HUMAN	Homo sapiens X1 Rho GTP-binding protein, segment 1/2
28522 19770				1.80	2.0E-15 AV13038470-010	EST HUMAN	GT1-T0385-162038470-010 T0385 Homo sapiens cDNA
8948 19416				1.67	6.0E-15 BF432200.1	EST HUMAN	na65tcf2-2X1 Scores: NSP_F_B SW OT_F_A_P_S1 Homo sapiens cDNA clone IMAGE_3
404 10350	20177			5.79	5.0E-15 AL165208.2	EST HUMAN	Homo sapiens chromosome 21 segment Hs21C108
2793 12905	22490			1.38	5.0E-15 UR1528.1	EST HUMAN	Human hemerytin hemochromatosis region, histone 2A-like protein gene, hemerytin hemochromatosis (Hh4) gene; Retinoblastoma and adenosine triphosphate translocase (Rb7) gene, complete cds
3423 13340				1	5.0E-16 AW256817.1	EST HUMAN	UH-BV07-090-07-0-C01-01-1 NC_015249 Sub1 Homo sapiens cDNA clone IMAGE:7312193
8063 17854				2.22	5.0E-15 AV1303855.1	EST HUMAN	AV1303855 HTTF Homo sapiens cDNA clone HTTCA06 5
4221 90883	19779			2.6	4.0E-15 AL1653039.2	EST HUMAN	Homo sapiens chromosome 21 segment Hs21C103
4029 13942	23720			0.76	4.0E-15 AL115098.1	EST HUMAN	D4F2p76f1C0510_11761 (synonym: Homo_1) Homo sapiens cDNA clone DKF2p76f1C0510 5'
9414 19538	29623			1.38	4.0E-15 AJ1303894.1	EST HUMAN	Homo sapiens mRNA for transcription factor
8414 16348	29624			2.38	4.0E-15 AJ1303894.1	EST HUMAN	Homo sapiens mRNA for transcription factor
4123 14023				5.93	3.0E-15 NB4942.1	EST HUMAN	LY114Z Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone LY114Z 6' similar to LY114Z
4853 14724				1.41	3.0E-15 PR0495	ANFICARDIOLATIN	
4805 14832	24599			0.88	3.0E-15 PR0495	SWISSPROT	NADH-UROQUINONE OXIDOREDUCTASE CHAIN 5
4855 14832	24600			0.88	3.0E-15 AA078007.1	EST HUMAN	7P01 F03 Chromosome 7 Plasmid cDNA Library/Homo sapiens cDNA clone 7P01/F03
6314 16177	28335			2.88	3.0E-15 M27285.1	EST HUMAN	Mas musculus ultra high sulfur keratin gene, complete cds
6314 16177	28336			2.88	3.0E-15 M27285.1	EST HUMAN	Mas musculus ultra high sulfur keratin gene, complete cds
7709 17559				1.87	3.0E-15 AA807129.1	EST_HUMAN	oc65e07_1 NC_015249_1 Homo sapiens cDNA clone IMAGE:1351764 3' similar to contains MER191
8173 18001	28311			2.71	3.0E-15 AB228988.1	EST HUMAN	MER19 repetitive element.
260 10216	20053			3.29	2.0E-15 AF222389.1	EST HUMAN	Homo sapiens DNA, DEUC1 to ORC1L4 gene region, section 1/2 (DEUC1, ORC1L3, ORC1L4 genes, complete cds)
304 10320	20141			3.23	2.0E-15 AF222389.1	EST HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
304 10320	20142			3.23	2.0E-15 AF222389.1	EST HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
364 10417	11417			1.14	2.0E-15 BG223221	EST HUMAN	Homo sapiens myohemerythrin protein FLJ20212 (FLJ20212), mRNA

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3465	13881	23196	1.04	2.0E-15 AF223391.1	NT	Human cappiens calcium channel alpha1E subunit (Ca/CNA1E) gene, exons 7-49, and partial cds, alternatively spliced	
3465	13881	23187	1.04	2.0E-15 AF223391.1	NT	Human cappiens calcium channel alpha1E subunit (Ca/CNA1E) gene, exons 7-49, and partial cds, alternatively spliced	
4522	14415		2.07	2.0E-15 AB093535.1	EST_HUMAN	(W0706.xt Scores, NF_1_GBC_S1 Homo sapiens cDNA clone IMAGE:2349823 3 similar to TR-Q161043 Q51043_NINEN ;	
5097	14896	24741	1.33	2.0E-15 P13903	SWISSPROT	REACTIVE PROLINE-RICH CELL WALL PROTEIN 2 PRECURSOR	
5097	14896	24742	1.33	2.0E-15 P13903	SWISSPROT	REACTIVE PROLINE-RICH CELL WALL PROTEIN 2 PRECURSOR	
6223	15089		1.71	2.0E-15 AJ408777.1	NT	Human cappiens ASCL1 gene; CEGP1 gene; C1orf16 gene; C1orf16 gene and C1orf17 gene	
6310	16173	28331	2.2	2.0E-15 AA704195.1	EST_HUMAN	[77050.1x Scores, fetal liver - spleen, 1NFSL_S1 Homo sapiens cDNA clone IMAGE:260204 3]	
6375	16237	28397	5.13	2.0E-15 WU05064.1	EST_HUMAN	[z78701.1x Scores, fetal lung, NBL16W_Homo sapiens cDNA clone IMAGE:2389875 5 similar to WP-F4fA8_CEF227 TRANSPONSE S ;	
7163	17340	2222	2.72	2.0E-15 DI1547.1	EST_HUMAN	Human DNA_SINE repetitive element	
7410	17277	27484	1.20	2.0E-15 AV379405.1	EST_HUMAN	CW04HT024+201094078+12 HT0244_Homo sapiens cDNA	
8212	18986		1.26	2.0E-15 AV379405.1	EST_HUMAN	CW04HT024+201094078+12 HT0244_Homo sapiens cDNA	
8779	13391	23196	3.01	2.0E-15 AF223391.1	NT	Human cappiens calcium channel alpha1E subunit (Ca/CNA1E) gene, segment 1/2	
9799	13381	23187	2.22	2.0E-15 AF223391.1	NT	Human cappiens calcium channel alpha1E subunit (Ca/CNA1E) gene, exons 7-49, and partial cds, alternatively spliced	
2747	12099		1.84	1.0E-15 AB080954.1	EST_HUMAN	(bc28050.xt NCI_CGAP_Lu24_Homo sapiens cDNA clone IMAGE:2270745 3 similar to TR-Q13539 Q13539 MARINER TRANSPOZASE ;	
2979	12096	22706	0.8	1.0E-15 BE045884.1	EST_HUMAN	hakuroN1_HNC_CGAP_Ov64_Homo sapiens cDNA clone IMAGE:25061612 5	
3103	13029	22825	0.59	1.0E-15 PB0547	SWISSPROT	LNE-1 REVERSE TRANSCRIPTASE_HOMOLOGO	
4282	14161	23939	0.8	1.0E-15 BE182695.1	EST_HUMAN	RC-3-H [0948]-101094072-005 H1 [0948] Homo sapiens cDNA	
5098	14896	24751	1.15	1.0E-15 AB084028.1	EST_HUMAN	wb6601.Lx Scores fetal liver cDNA clone IMAGE:2494690 3	
5844	15150	28984	1.83	1.0E-15 BE073083.1	EST_HUMAN	yeD01.Lx Scores fetal liver cDNA clone IMAGE:2202343 similar to contains MER47 repetitive element;	
6162	16088		1.98	1.0E-15 BE073217.1	EST_HUMAN	Q18-B1_P0562+2101000074_0516 5 [0569] Homo sapiens cDNA	
6791	16783	26992	1.28	1.0E-15 AL165280.2	NT	Human cappiens chromosome 21 segment 1	
6805	16783	26993	4.57	1.0E-15 AL000978.1	EST_HUMAN	Q18B06.xt Scores, testis, NT Human cappiens cDNA clone IMAGE:1755227 3	
6905	16783	26997	4.57	1.0E-15 AL000978.1	EST_HUMAN	Q18B06.xt Scores, testis, NT Human cappiens cDNA clone IMAGE:1755227 3	
7227	17104	27283	1.44	1.0E-15	4507206 NT	Human cappiens spermidine synthase (SRM) mRNA	

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Probe ID	Exon No.	ORF SEQ ID	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
8193	18070	28331	6.31	1.0E-15	AF014693.1	NT	Homo sapiens major histocompatibility locus class III region (TCATCA) repeat (CCTAT) 1 mRNA element.
9887	19402	25131	3.71	1.0E-15	AJ785944.1	EST_HUMAN	Homo sapiens c1 (Drepanocystis c1) (TCATCA) displacement protein (CCTAT) 1 mRNA
4404	14298	24982	1.03	9.0E-16	4653168.1	NT	Hom sapiens c1 (Drepanocystis c1) (TCATCA) displacement protein (CCTAT) 1 mRNA
8361	18236	28495	2.6	9.0E-16	FBXO85B.1	EST_HUMAN	1 S2C1P5 normalized infant brain cDNA sequence cDNA clone S2C1P5
9349	16206	25958	1.5	7.0E-16	Q88507	SWISSPROT	PROTEIN:ARGININE DEMINIMASE TYPE IV (PEPTIDYLARGININE DEMINIMASE TYPE IV) (P-ADR4)
6343	18206	28569	1.5	7.0E-16	Q88807	SWISSPROT	PROTEIN:ARGININE DEMINIMASE TYPE IV (P-ADH4)
8816	18656	11983	6.8	7.0E-16	T04145.1	EST_HUMAN	PEPTIDYLARGININE DEMINIMASE TYPE IV (P-ADH4) (T04145.1) Human sapiens cDNA clone IMAGE:110062_5
2084	11983	11983	8.32	6.0E-16	AV972011.1	EST_HUMAN	EST:TS34702 MAGE responsiveness, MAGL Homo sapiens cDNA
1477	11352	21540	1.09	5.0E-16	AJ251154.1	NT	Mus musculus olfactory receptor cluster; OR37A, OR37B, OR37C, OR37E genes and OR37D pseudogenes c80004.1 Scaree, Joel, fetus, N241H2P_2w Homo sapiens cDNA clone IMAGE:123076_3 similar to c80004.1 Scaree, Joel, fetus, N241H2P_2w element. 1 P-ADH4
2647	12514	22404	1.79	5.0E-16	AA1962175.1	EST_HUMAN	Homo sapiens chromosome 21 segment 1 P-ADH4
7784	17654	27867	1.69	5.0E-16	AL163246.1	NT	Homo sapiens chromosome 11 P-ADH4 5' Homo sapiens cDNA clone IMAGE:4104129_5'
8850	18923	28914	3.33	5.0E-16	BG272981.1	EST_HUMAN	6 P-ADH4 5' Homo sapiens cDNA clone IMAGE:4104129_5'
8904	18391	22107	8.34	5.0E-16	BB15016.1	EST_HUMAN	Homo sapiens cGTP-binding protein (GTPBP), mRNA
2192	18391	22107	1.27	4.0E-16	AB501723.1	EST_HUMAN	Homo sapiens cGTP-binding protein and partial cds
2328	12209	22108	1.32	4.0E-16	AV1707168.1	EST_HUMAN	GUT1 LM00058-200309-1115-02 UW00036 Homo sapiens cDNA
2328	13326	23243	1.35	4.0E-16	AV1707168.1	EST_HUMAN	GUT1 LM00058-200309-1115-02 UW00036 Homo sapiens cDNA
3411	13326	23243	1.74	4.0E-16	AV1707168.1	EST_HUMAN	GUT1 LM00058-200309-1115-02 UW00036 Homo sapiens cDNA
4050	15952	23278	3.35	4.0E-16	BIG038575.1	EST_HUMAN	HM-BTB038575-201606-02-909 BT038575 Homo sapiens cDNA
5092	14892	23279	3.35	4.0E-16	BE053875.1	EST_HUMAN	HM-BTB038575-201606-02-909 BT038575 Homo sapiens cDNA
6338	18306	28375	33.8	4.0E-16	AL163246.2	EST_HUMAN	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
8851	18421	27236	2.22	4.0E-16	AL163246.2	EST_HUMAN	Homo sapiens chromosome 21 segment 1 P-ADH4
9105	19436	28981	1.74	4.0E-16	AV170908.1	EST_HUMAN	Homo sapiens cDNA clone IMAGE:10024_5'
9344	18597	26319	1.94	4.0E-16	CG8546	SWISSPROT	LINE, REVERSE TRANSCRIPTASE, HOMOLOG
9255	18934	26319	2.04	4.0E-16	CG8547	EST_HUMAN	C55947 Human pancreatic beta cell Homo sapiens cDNA clone IMAGE:653555
128	10102	19024	1.59	4.0E-16	AV170926.1	EST_HUMAN	BE053875-201606-02-909 BT038575 Homo sapiens cDNA clone IMAGE:2486576_5'
128	10102	19825	1.59	3.0E-16	AV170926.1	EST_HUMAN	BE053875-201606-02-909 BT038575 Homo sapiens cDNA clone IMAGE:2486576_5'
468	14042	19825	1.47	3.0E-16	AV170926.1	EST_HUMAN	BE053875-201606-02-909 BT038575 Homo sapiens cDNA clone IMAGE:2486576_5'

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Probe Seq ID No:	ORF Seq ID No:	Exon No:	Expression Signal	Most Similar E LAST E Value	Top Hit E LAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
7876 17720		2.18	9.0E-17	Af220719.1	NT	Hom sapiens pituitary tumor transforming gene atrabin (PTTG) gene, complete cds	RC1-HM0005-220900-021-004	Hom sapiens cDNA clone IMAGE:010032465300-1-16-401 OT00321	
10071 10819		1.7	8.1E-17	AW86071.1	EST_HUMAN	Hom sapiens cDNA clone IMAGE:010032465300-1-16-401 OT00321	RC1-HM0005-220900-021-004	Hom sapiens cDNA clone IMAGE:010032465300-1-16-401 OT00321	
38177 13729		0.87	8.0E-17	AL163280.2	NT	Hom sapiens chromosome 21 segment HSB21C080	RC1-HM0005-220900-021-004	Hom sapiens cDNA clone IMAGE:010032465300-1-16-401 OT00321	
54227 19444	25402		0.569	EE172081.1	EST_HUMAN	Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	
63111 16174		1.36	8.0E-17	AV720759.1	EST_HUMAN	AV720759 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	
1442 11347		3.18	7.0E-17	AF220597.1	EST_HUMAN	Mus musculus apolipoprotein B editing complex 2 (ApoBec2), mRNA	RC1-HM0005-220900-021-004	Mus musculus apolipoprotein B editing complex 2 (ApoBec2), mRNA	
52802 15184		3.05	7.0E-17	AF220596.1	NT	Hom sapiens apolipoprotein MTRP (MTRP) mRNA, partial cds, alternative spliced	RC1-HM0005-220900-021-004	Hom sapiens apolipoprotein MTRP (MTRP) mRNA, partial cds, alternative spliced	
6017 15621	20652		6.83	7.0E-17	Af220584.3	NT	Mus musculus UMT-2 gene, partial cds; putative arylalkylamine N-acetyltransferase, transmembrane conductance regulator (GPR) genes, section 1 of the complete cds; and unknown gene	RC1-HM0005-220900-021-004	Mus musculus UMT-2 gene, partial cds; putative arylalkylamine N-acetyltransferase, transmembrane conductance regulator (GPR) genes, section 1 of the complete cds; and unknown gene
198 10768	19948		4.78	6.0E-17	AW865580.1	EST_HUMAN	Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569
58112 16717	28830		1.61	6.0E-17	AW865272.1	EST_HUMAN	L1 repetitive element	RC1-HM0005-220900-021-004	L1 repetitive element
4115 9962	19773		2.31	5.0E-17	AT720059.1	EST_HUMAN	AT720059 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	AT720059 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569
6476 16335	28502		2.07	5.0E-17	AT720110.1	EST_HUMAN	AT720110 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	AT720110 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569
6783 16596	28937		2.12	4.0E-17	AL163247.2	NT	Hom sapiens chromosome 21 segment HSB21C047	RC1-HM0005-220900-021-004	Hom sapiens chromosome 21 segment HSB21C047
9171 18914			1.98	4.0E-17	AL073546.1	EST_HUMAN	AL073546 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	AL073546 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569
2051 11941	211836		1.35	3.0E-17	AW7119123.1	EST_HUMAN	AW7119123 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	AW7119123 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569
3157 13082		1.31	3.0E-17	AT720410.1	EST_HUMAN	AT720410 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	AT720410 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	
3950 13004	29293		1.14	3.0E-17	BE226522.1	EST_HUMAN	BE226522 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	BE226522 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569
3960 13004	23234		1.14	3.0E-17	BE226522.1	EST_HUMAN	BE226522 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	BE226522 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569
7594 17445	27650		4.72	3.0E-17	AB268985.1	NT	complete cds	RC1-HM0005-220900-021-004	complete cds
9134 18890			3.16	3.0E-17	114170985.1	EST_HUMAN	Hom sapiens SEC14 (S. cerevisiae) like 2 (SEC14L2), mRNA	RC1-HM0005-220900-021-004	Hom sapiens SEC14 (S. cerevisiae) like 2 (SEC14L2), mRNA
9003 16398			15.82	3.0E-17	AT720204.1	EST_HUMAN	AT720204 GLC Human cDNA clone GLCD1 F028 G	RC1-HM0005-220900-021-004	AT720204 GLC Human cDNA clone GLCD1 F028 G
950 10309	20127		2.81	2.0E-17	AT720084.1	EST_HUMAN	AT720084 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	AT720084 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569
951 10309	20127		2	2.0E-17	AT720080.1	EST_HUMAN	AT720080 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	AT720080 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569
9712 10596			1.27	2.0E-17	AA722952.1	EST_HUMAN	AA722952 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569	RC1-HM0005-220900-021-004	AA722952 HTF Hom sapiens cDNA clone IMAGE:010032465300-03-404-110569
2397 12276	22170		2.8	2.0E-17	C229863	SWISSPROT	ZONADHESIN	RC1-HM0005-220900-021-004	ZONADHESIN
2397 12276	22171		2.8	2.0E-17	C229863	SWISSPROT	ZONADHESIN PRECURSOR	RC1-HM0005-220900-021-004	ZONADHESIN PRECURSOR

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Probe Seq ID No.	ORF Seq ID No:	Exon Seq ID No:	Expression Signal Value	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
NEUROFILAMENT TRIPLETT H PROTEIN (200 kDa NEUROFILAMENT PROTEIN) (NEUROFILAMENT HEAVY POLYPEPTIDE) (NFH)							
2869	12826	22621	5.62	2.0E-17 P1/2036	SWISSPROT		
5295	15216	28017	1.95	2.0E-17 M2/27685.1	NT		Mus musculus ultra high sulfur keratin gene, complete cds
5295	15216	28018	1.95	2.0E-17 M2/27685.1	NT		Mus musculus ultra high sulfur keratin gene, complete cds
5790	15666		2.07	2.0E-17 A/H15666.1	NT		Tomo sapiens tRFC class 1 region
6711	16691	26779	1.44	2.0E-17 Q8B1S6	SWISSPROT		EST/HUMAN
6825	16803	26967	1.38	2.0E-17 AA000640.1	EST/HUMAN		EST/330a. Tests tumor Homo sapiens cDNA 5' end similar to glycogenin
7669	17549	27772	2.72	2.0E-17 A/H3/2472	NT		Homo sapiens chromosome 21 segment 1S2/C0A7
7669	17549	27773	2.72	2.0E-17 A/H3/2472	NT		Homo sapiens chromosome 21 segment 1S2/C0A7
7887	17737	27981	5.3	2.0E-17 D13391.1	NT		Human Cyp19 gene for aromatase cytochrome P-450, promoter region (containing two cis-acting transcriptional regulatory elements)
733	10695	21469	3.37	1.0E-17 P0B183	SWISSPROT		MULTIDRUG RESISTANCE PROTEIN 1 (P-GLYCOPROTEIN 1)
1729	11680	21469	2.45	1.0E-17 A/H3/2072.2	NT		Homo sapiens chromosome 21 segment H3/2072
2069	11980	21863	1.66	1.0E-17 P0C461	SWISSPROT		COLLAGEN ALPH1(IV) CHAN FREQUISOR
2287	12170	22057	1.48	1.0E-17 U7941.0.1	NT		Homo sapiens thrombospondin 1 (THBS2) gene, promoter region and exons 1A and 1B
3519	13435		1.01	1.0E-17 AF224669.1	NT		Homo sapiens mannanase, beta 1, 4mannosidase (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBC2D3) genes, complete cds
4045	13847		7.17	1.0E-17 R050942.1	EST HUMAN		Y00071.1 Scarefet like spider cDNA clone IMAGE:1238865'
5885	15792		4.7	1.0E-17 NW_468498.1	EST HUMAN		CB98451.1 NCL_CQAP_OML1.1 Homo sapiens cDNA clone IMAGE:2921313 similar to contains Ali
60008	15911	20037	1.44	1.0E-17 A/H15942.1	EST HUMAN		transcriptional regulatory element/contains LTR/ret LTR repetitive segment;
60008	15911	20038	1.44	1.0E-17 A/H15942.1	EST HUMAN		0065050.1x1.2 Scores: 661 Jung_NISHI/19W Homo sapiens cDNA clone IMAGE:1743253'
6216	16082	26232	1.32	1.0E-17 G08531	SWISSPROT		URIDYL PHOSPHORYLASE (URPASE)
6718	16696	26821	2.01	1.0E-17 Q28824	SWISSPROT		MYOOSIN LIGHT CHAIN KINASE, SMOOTH MUSCLE (MLCK) (CONTAINS: TELOKIN)
2422	12269	22196	0.96	9.0E-18 A/H74078.1	EST HUMAN		1p15.1-2.1 Striatine fetal ratna 39/72/22 Homo sapiens cDNA clone IMAGE:869862.3
7468	17328	13630	3.26	9.0E-18 A/H7167.1	EST HUMAN		[869863.1x1 Scores: NSB_FBW_LT_PA_P_S1-Homo sapiens cDNA clone IMAGE:2148356.3'
3718	13415	23415	1.75	8.0E-18	4769977	NT	Homo sapiens protein tyrosine phosphatases non-receptor type substrate 1 (PTNS1) mRNA
346	10305	20121	8.39	7.0E-18 AW319369.1	EST HUMAN		xx101004x1 NCL CGAP_Pan Homo sapiens cDNA clone IMAGE:2837013 similar to gpi:209868 005
346	10305	20122	8.39	7.0E-18 AW316976.1	EST HUMAN		xx00045x1 NCL CGAP_Pan Homo sapiens cDNA clone IMAGE:2837013 similar to gpi:209868 005
5136	15003	24774	0.85	7.0E-18 R16220.1	EST HUMAN		yeast4507.1x1 Scores: 661 Homo sapiens cDNA clone IMAGE:1532856.3 similar to contains L1 repetitive element;

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No:	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6538	10235	202121	5.73	7.0E-18	AN126976.1	EST_HUMAN RIBOSOMAL PROTEIN L4 (HUMAN); RIBOSOMAL PROTEIN L4 (HUMAN);
9038	10235	20122	6.73	7.0E-18	AW516976.1	EST_HUMAN RIBOSOMAL PROTEIN L4 (HUMAN); RIBOSOMAL PROTEIN L4 (HUMAN);
3225	13178	22576	1.16	6.0E-18	XJ1791.2	NT Ratios: nonregucular partial Gata1-like protein/protease/heatin 1, enhancer region
4641	14629		3.37	6.0E-18	PS2181	SWISSPROT (TGase C) (TGC)
8709	19678		2.69	8.0E-18	114291.66	NT Human sexosome chromosomal protein 4 (H. sapiens) (LOC05444); mRNA
8476	18349	285714	1.76	6.0E-18	AL163246.2	NT Human sexosome chromosomal protein 21 segment S-21(CD46) Human DNA, DMB, HLA-Z1, PFP2, LMP2, TAP2, DOB, DQB2 and RING8, 9, 13 and 14 Genes
8642	18656	28784	1.78	6.0E-18	X87344.1	NT Human sexosome hydrolase (ACO2) gene exon 4
6334	18402	285038	3.69	6.0E-18	US75229.1	NT Smb611.1x Staves, Paloma, BlotWreaks...284HP8@99-Homo sapiens cDNA clone IMAGE:16329083 Human
1130	11044	20898	14.74	6.0E-18	AL128214.1	EST_HUMAN Similar to contains Alu repetitive element; mRNA
4217	14115	23893	0.82	5.0E-18	10946685	NT Human glomerular basement membrane polypeptide mRNA (#6555); Homo sapiens cDNA clone GEN-411F05 Human
5038	14628	247100	1.76	5.0E-18	DC161517.1	EST_HUMAN Human endogenous retrovirus HERV-P-17D 5'
6224	15147	24914	1.38	6.0E-18	AF067814.1	NT Human
7081	16928	27128	4.26	6.0E-18	BE143312.1	EST_HUMAN Human lymphocyte activation-associated protein (LOC51088). mRNA
8346	162223	28474	4.33	5.0E-18	10242378	NT Human lymphocyte activation-associated protein (LOC51088). mRNA
9340	162223	28475	4.33	5.0E-18	10242379	NT Human
9872	18125	19612	5.3	6.0E-18	AW807182.1	EST_HUMAN Human
6837	18338	19098	1.36	4.0E-18	BE044076.1	EST_HUMAN Human
119	10069	19916	1.36	4.0E-18	BE044075.1	EST_HUMAN Human
1848	11742		1.08	4.0E-18	AT378592.1	EST_HUMAN mRNA;C6orf50_NCI_CGAP_Ut1 Homo sapiens cDNA clone IMAGE:2392055 mRNA
2164	12042	21040	0.98	4.0E-18	CH06430	SWISSPROT N-acetylglactosaminyltransferase (branching enzyme) (GNAT)
2154	12042	21041	0.98	4.0E-18	Q08430	SWISSPROT N-acetylglactosaminyltransferase (branching enzyme) (GNAT)
6203	18214	25014	2.35	4.0E-18	AI017955.1	EST_HUMAN 10234607 Staves, NE, T_OBC, S1 Homo sapiens cDNA clone IMAGE:16271983 Human

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Probe Seq ID NC:	ORF Seq ID NC:	Expression Signs	Most Similar (Top) E-Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6293 15214	25015		2.55	4.0E-18	AUD17565.1	EST_HUMAN
8370 18247	28400		7.12	4.0E-18	AA371807.1	EST_HUMAN
831 10758	20600		2.58	3.0E-18	AA814198.1	EST_HUMAN
9114 10538	20986		2.41	3.0E-18	BE029834.1	EST_HUMAN
3887 13778	23571		1.19	3.0E-18	AL162347.2	NT
6034 16229	26169		6.2	3.0E-18	AL162317.1	EST_HUMAN
6642 19210			4.62	3.0E-18	AV0021015.1	EST_HUMAN
251 10271	20034		2.83	2.0E-18	AW838920.1	EST_HUMAN
1185 11049			4.722	2.0E-18	BE2265097.1	EST_HUMAN
6322 18242			3.2	2.0E-18	AA888910.1	EST_HUMAN
6390 16239	25149		3.04	2.0E-18	DI14547.1	INT
6390 12259	26159		3.24	2.0E-18	DI14547.1	INT
5585 18500			1.67	2.0E-18	BF347225.1	EST_HUMAN
5684 18720	26934		3.63	2.0E-18	AW868853.1	EST_HUMAN
. 7779 17629	27861		1.53	2.0E-18	AW151673.1	EST_HUMAN
7778 17629	27862		1.53	2.0E-18	AW151673.1	EST_HUMAN
8340 18217	28469		5.32	2.0E-18	AW470791.1	EST_HUMAN
8668 18774	28095		4.44	2.0E-18	AW151209.1	EST_HUMAN
9325 11048			3.15	2.0E-18	BE2265097.1	EST_HUMAN
4319 14215			1.02	1.0E-18	TD5406.1	EST_HUMAN
6288 15208	24685		2.38	1.0E-18	AVG53405.1	EST_HUMAN
5419 15340	26304		1.97	1.0E-18	D00058.1	NT
5419 15340	26305		1.97	1.0E-18	D00089.1	NT
5683 15790	25912		1.32	1.0E-18	AL163280.2	NT

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Single Exon Probes Expressed in Heart

Probe Seq ID No.	Exon Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3778 13890	23476	1.74	3.0E-19	CP28697	SWISSPROT	BETA2-ADRENERGIC RECEPTOR
3778 13890	23476	1.74	3.0E-19	CP28697	SWISSPROT	BETA2-ADRENERGIC RECEPTOR
4345 14242	24024	1.16	3.0E-19	AV708195.1	EST_HUMAN	AV708195.1 Homo sapiens cDNA clone ACDA11 5'
6370 16232		2.47	3.0E-19	11492244	NT	Homo sapiens similar to side-keto reductase family 1, member B11 (edose reductase-like) (H. sapiens)
7443 16456	28645	1.23	3.0E-19	X86058.1	NT	Small molecule mRNA for TPCR33 protein
9446 19068		7.38	1.0E-19	AF16520.1	NT	Homo sapiens chromosome 21 segment HS21.CD01
2613 12897	22279	17.57	2.0E-19	BA1632012	NT	Homo sapiens cDNA clone MAGE-3801880 5'
6849 16728	26923	6.86	2.0E-19	BA240911	NT	Scarena retina cDNA clone MAGE-3638310 5'
473 10417		1.6	1.0E-19	BA1469611.1	EST_HUMAN	BA1469611.1 Homo sapiens cDNA clone MAGE-3638310 5'
2118 12007	21008	1.4	1.0E-19	BA07686.1	EST_HUMAN	BA07686.1 Scarena retina cDNA clone MAGE-3638310 5'
2095 12850		2.68	1.0E-19	BA16044.1	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 7 (PTNS1) mRNA
2817 12745		6.93	1.0E-19	47598677	NT	BA16044.1 Scarena retina cDNA clone MAGE-3638310 5' similar to contains MER37.2
3385 18274	23075	1.27	1.0E-19	AA834867.1	EST_HUMAN	AA834867.1 similar to contains MER37.2
5701 16609	25711	2.37	1.0E-19	U21186.1	NT	Cryptic gene, putative endonuclease/esterase/transferase mRNA, partial cds
6819 16737	28980	1.70	1.0E-19	MB4657.1	NT	Rabbit phospholysin gene beta subunit mRNA, complete cds
7076 16983		2.83	1.0E-19	T86020.1	EST_HUMAN	Mer37.2.1 Scarena retina live spleen 1HFLS Homo sapiens cDNA clone MAGE-123243 5' similar to contains OPR repetitive element;
7853 17073	27848	25.21	1.0E-19	AW81250.1	EST_HUMAN	AW81250.1 Mer37.2.1.1 Scarena retina live spleen 1HFLS Homo sapiens cDNA clone MAGE-123243 5'
7857 17707	27953	1.79	1.0E-19	IN144631.1	EST_HUMAN	IN144631.1 Mer37.2.1.1 Scarena retina live spleen 1HFLS Homo sapiens cDNA clone MAGE-123243 5'
6003 15910	26335	2.22	8.0E-20	7857285.1	NT	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
6005 15910	26336	2.22	8.0E-20	7857285.1	NT	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
6439 18300	26462	1.31	8.0E-20	A1223171.1	EST_HUMAN	Apb609.1 Scarena, N[=]T GBC S1 Homo sapiens cDNA clone IMAGE-1642089 3'
6439 18300	26463	1.31	8.0E-20	A1223171.1	EST_HUMAN	Apb609.1 Scarena, N[=]T GBC S1 Homo sapiens cDNA clone IMAGE-1642089 3'
3226 13-81	22801	0.89	7.0E-20	CF282455.1	EST_HUMAN	CF282455.1 Homo sapiens cDNA clone MAGE-103718 similar to contains MER29 b2
6178 16339	24652	5.63	7.0E-20	AL138120.1	EST_HUMAN	AL138120.1 Homo sapiens cDNA clone IMAGE-103718 similar to contains MER29 b2
6947 16826	27018	10.09	7.0E-20	AA567657.1	EST_HUMAN	AA567657.1 Homo sapiens cDNA clone MAGE-103718 similar to contains MER29 b2
6947 16826	27019	10.99	7.0E-20	AA567657.1	EST_HUMAN	AA567657.1 Homo sapiens cDNA clone MAGE-103718 similar to contains MER29 b2
6952 16759		10.45	7.0E-20	BA12653.1	NT	Homo sapiens fibromodulin protein 1 [3a] (RP13A). mRNA
3608 13424	23227	3.65	6.0E-20	F360166	SWISSPROT	ALU SUBFAMILY J SEQUENCE CONTAMINATION WARNING ENTRY

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4175 14385	14075	23850	2.55	6.0E-20	BE022643.1	EST_HUMAN	601441231/Human cDNA clone IMAGE:39162231 5'
4491			1.17	5.0E-20	AV725123.1	EST_HUMAN	A17755/23/Human cDNA clone IMAGE:418161 3' similar to MER301_Human spleen_spleen_NFLS_S1
6034	16514	26704	4.06	5.0E-20	W90525.1	EST_HUMAN	5778008_1 Scores: 1.01 Liver_spleen_spleen_NFLS_S1 Human spleen cDNA clone IMAGE:418161 3' similar to MER301_Human spleen element;
6634	16514	26705	4.06	5.0E-20	W90525.1	EST_HUMAN	5778008_1 Scores: 1.01 Spleen_fetal liver_spleen_NFLS_S1 Human spleen cDNA clone IMAGE:418161 3' similar to MER301_Human spleen element;
7128	17005	27197	1.44	5.0E-20	AB028174.1	EST_HUMAN	Mis miscreatis NAME:5'mRNA complete cds
7128	17005	27198	1.44	5.0E-20	AB028174.1	NT	Mis miscreatis NAME:5'mRNA complete cds
6624	16514	6103	0.03	4.0E-20	AB74852.1	EST_HUMAN	624645_x1 NCI CGAP_0x38 Human spleen cDNA clone IMAGE:2783396 3'
7695	17845	28087	1.17	4.0E-20	AW837499.1	EST_HUMAN	QV3-D70045-090200-080-064 DT0043 Human spleen cDNA
2092	11981	21876	1.04	3.0E-20	U03888.1	NT	Human BYP-21 gene
4116	14075	23795	1.59	3.0E-20	P23278	SWISSPROT	01.FACTORY RECEP7 ORF-LIKE PROTEIN 14
4524	14477	24201	0.86	3.0E-20	AA037616.1	EST_HUMAN	3639561_1.5 Scores:Pregnant uterus_NBI-PU Human spleen cDNA clone IMAGE:454265 3' similar to Human DNA_SINE repetitive element;
7172	17049	23820	0.36	3.0E-20	D14547.1	NT	Human DNA_SINE repetitive element;
8065	17946		2.06	3.0E-20	IP13869	SWISSPROT	RETROVIRUS RELATED POLYPROTEIN (CONTAINS: REVERSE TRANSPRTASE; ENDONUCLEASE)
9105	18626	25352	5.37	3.0E-20	SE683422.1	EST_HUMAN	60151418/F_NIH_MGCG_71 Human spleen cDNA clone IMAGE:3915222 5'
813	10741	-	4.52	2.0E-20	AW303868.1	EST_HUMAN	PF07461_405 RIBOSOMAL PROTEIN_SS_1
1095	11011	20852	2.03	2.0E-20	AA51635.1	EST_HUMAN	PF090405_x1 NCI CGAP_Lip2 Human spleen cDNA clone IMAGE:940097 similar to TRG1224066
1095	11011	20853	2.03	2.0E-20	AA51635.1	EST_HUMAN	PF090405_x1 NCI CGAP_Lip2 Human spleen cDNA clone IMAGE:940097 similar to TRG1224066
2766	10741		2.72	2.0E-20	AW303868.1	EST_HUMAN	PF090406_x1 NCI CGAP_UH Human spleen cDNA clone IMAGE:2761098 3' similar to SW_RSS_MOUSE
4866	14746	24625	4.32	2.0E-20	Q28883	SWISSPROT	P23278_0.1 NCI CGAP_UH FUNCTION UNKNOWN;
4866	14746	24626	4.32	2.0E-20	C28883	SWISSPROT	ZONADHEIN PRECURSOR
5001	14690		1.95	2.0E-20	5174538_NT	SWISSPROT	Homologous_made dehydrogenase_1_NAD (oxido)(MDH1) mRNA
7301	17177	27378	2.96	2.0E-20	D10085.1	NT	Homologous_RGH1 gene, retrovirus-like element
7301	17177	27379	2.95	2.0E-20	D10085.1	NT	Homologous_RGH1 gene, retrovirus-like element
8983	18797	29089	1.95	2.0E-20	AA70875.1	EST_HUMAN	PF0585_x1 NCI CGAP_OCB1 Human spleen cDNA clone IMAGE:1309393 3' similar to contains MER4_12

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Probe SEQ ID NO:	Exon SEQ ID NO:	Orf SEQ ID NO:	Expression Signal	Most Similar (Top) HIR BLAST E Value	Top HIR Adhesion No.	Top HIR Database Source	Top Hit Descriptor
8653	18707	26090	1.95	2.0E-20 AA760755.1	EST_HUMAN	EST_HUMAN	gads65.51 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:13059255 3' similar to contains MER4.52 HIF-2 repetitive element; GHR2203.1 Chromosome 22 exon 1 Homo sapiens cDNA clone C2-391 5'
9874	19492	25129	1.5	2.0E-20 HS65271.1	EST_HUMAN	EST_HUMAN	gads65.51 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:12811 5' similar to contains MER4.52 HIF-2 repetitive element;
1987	12548	21751	5.25	1.0E-20 AA261061.1	EST_HUMAN	EST_HUMAN	mer19.19 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3135155 3' similar to contains L1.12 L1 repetitive element;
4336	14245	24018	1	1.0E-20 BP115158.1	EST_HUMAN	EST_HUMAN	Homo sapiens Autosomal Highly Conserved Protein (AHC2), mRNA
7285	17151	27350	2.42	1.0E-20 11478491 NT	NT	NT	Homo sapiens calcium channel alpha 1E subunit (CACNA1E) gene, exons 7-9, and partial cds, alternatively spliced
8839	18692	28940	2.61	1.0E-20 AF223394.1	NT	NT	ntdgapt1 NCL CGAP_P_11 Homo sapiens cDNA clone IMAGE:746594 similar to contains L1.13 L1 repetitive element;
6021	18011	18011	1.84	1.0E-20 AA204583.1	EST_HUMAN	EST_HUMAN	A003514 Selected aromatase 21' cDNA library Homo sapiens cDNA clone IMAGE:13059255 3'
2885	12810	1.08	9.0E-21 AJ035154.1	EST_HUMAN	EST_HUMAN	RC3-NN0008-000000-0021-503 NN0008-Homo sapiens cDNA bbs302C_Y1 NIH NGC 10 Homo sapiens cDNA clone IMAGE:284774 5' similar to SV40 NAM_HUMAN	
9446	18590	2358	9.0E-21 AW869188.1	EST_HUMAN	EST_HUMAN	05890_NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR, mRNA	
7116	18692		1.74	8.0E-21 AW674891.1	EST_HUMAN	EST_HUMAN	05710B11 NC1 CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1396385 3'
8825	18638	28922	3.42	8.0E-21 AA809411.1	SWISSPROT	SWISSPROT	DTT SYNTHASE A CHAIN (PROTEIN 9)
6207	18638	4.02	8.0E-21 Q21350	SWISSPROT	SWISSPROT	LAMININ BETA-1 CHAIN PRECURSOR (S-LAMININ) (LAMININ CHAIN B)	
2023	1914	21893	2.07	7.0E-21 P55800	SWISSPROT	LAMININ BETA-2 CHAIN PRECURSOR (S-LAMININ) (LAMININ CHAIN B3)	
2023	1914	21894	2.07	7.0E-21 P18500	EST_HUMAN	2575011 Scores: present_ukne, NSHU_Homo sapiens cDNA clone IMAGE:467958 6'	
4161	14091	4.50	7.0E-21 AA049502.1	EST_HUMAN	EST_HUMAN		
6887	16766	28982	1.43	7.0E-21 AA277557.1	NT	NT	Homo sapiens dT-2 gene for mitochondrial t(79')-deoxyribonucleic acid (dT-2_gene), exons 1-5
7036	16713	27102	6.84	7.0E-21 D4718.1	NT	NT	Human chromonosomal protein HMG1 non receptor gene
					z073403.51 Scores: full heart, NSHHW_Homo sapiens cDNA clone IMAGE:369981 3' similar to		
					z0734438.51 Scores: full heart, NSHHW_Homo sapiens cDNA clone IMAGE:11541608 3' similar to TR-OR2111		
8080	17071	28220	2.94	7.0E-21 AA723404.1	EST_HUMAN	EST_HUMAN	Homo sapiens P10/13 protein (P10D13), mRNA
8550	18458	28727	2.37	7.0E-21 770658 NT	EST_HUMAN	EST_HUMAN	6013043571 NIH_2T4 Homo sapiens cDNA clone IMAGE:363830 5'
4014	13922	23890	0.94	6.0E-21 BE408611.1	EST_HUMAN	EST_HUMAN	Homo sapiens protein tyrosine phosphatase, non-receptor type 27 (PTPN27), mRNA
9037	10831	20578	1.16	6.0E-21	50020301 NT	EST_HUMAN	cen27c03_51 Scores: INF_T_GBC_S1 Homo sapiens cDNA clone IMAGE:11541608 3' similar to TR-OR2111
2234	12119	22021	1.08	5.0E-21 AA028104.1	EST_HUMAN	EST_HUMAN	CD271 PRO-POU-LIKE PROTEIN:
4296	14165	23942	2.65	5.0E-21 BE598589.1	EST_HUMAN	EST_HUMAN	6013043571 NIH_2T4 Homo sapiens cDNA clone IMAGE:3635980 5'
4809	14852	24975	5.98	5.0E-21	4885474 NT	EST_HUMAN	Homo sapiens melanoma antigen, family C-1 (MAGEC1), mRNA

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Probe	Exon	ORF SEQ ID NO:	ORF SEQ ID NO:	Most Similar BLAST E Value	Top Hit BLAST E Value	Top Hit Assesment No.	Top Hit Database Source	Top Hit Descriptor
5109	149777			0.95	5.0E-21	207575.1	Homo sapiens DNA for amyloid precursor protein, complete cds LOC208851 NCL CGAP Homo sapiens DNA clone IMAGE:1573064 3' similar to TR-Q16650 Q16650	
1701	119102	21473		1.24	4.0E-21	AAB070713.1	EST; HUMAN	PMS2 mRNA, containing ORF1; OFF, segmental element; Homo sapiens mRNA for RTM, complete cds
61006	160000	26138		3.05	2.0E-21	AB165976.1	NT	Rattus norvegicus mRNA for RTM, complete cds
12168	12113	220115		1.06	3.0E-21	AB165201.1	EST; HUMAN	Homo sapiens chromosome 21 segment 012.1
3041	129688	227602		4.04	3.0E-21	AJ007972.1	NT	Homo sapiens LIG4/CB gene
5149	168677			1.72	3.0E-21	AB165795.1	EST; HUMAN	AB16544551 NIH-1MCF-5L Homo sapiens cDNA clone IMAGE:4054545 5
62028	159885	28100		4.79	3.0E-21	BF361003.1	EST; HUMAN	RC1-000083-28000-016 N1N0063 Homo sapiens cDNA
7889	17440	27856		1.55	2.0E-21	ABW887700.1	EST; HUMAN	OMIM000083-28000-016 N1N0063 Homo sapiens cDNA
6884	189722	24992		1.32	3.0E-21	ABW887701.2	EST; HUMAN	OMIM000083-28000-016 N1N0063 Homo sapiens cDNA
140	10114			14.75	2.0E-21	ABW887247.1	EST; HUMAN	QYVH704681 Homo sapiens cDNA
919	10843	20888		0.85	2.0E-21	ABD078572.1	EST; HUMAN	Homo sapiens mRNA for KIAA0387 protein, partial cds
919	10843	20889		0.85	2.0E-21	ABD078572.2	EST; HUMAN	Homo sapiens mRNA for KIAA0387 protein, partial cds
1193	111061			2.09	2.0E-21	ABD078440.1	EST; HUMAN	RC1-000131-141189-106 BT0311 Homo sapiens cDNA
2609	124688	22301		2.69	2.0E-21	Q28983	SWISSPROT	ZONADIASEIN PRECURSOR
2609	124688	22302		2.89	2.0E-21	Q28983	SWISSPROT	ZONADIASEIN PRECURSOR
8570	18230	25128		1.77	2.0E-21	NR024682.1	EST; HUMAN	IS302001 NCL CGAP, Part 1 NIH-1MCF-5L 1.1 kb PROTEIN, HYPOTHETICAL, 541 aa
8870	16779	20944		4.06	2.0E-21	EE147795.1	EST; HUMAN	QYHV704681-0019-019 NIH-1MCF-5L Homo sapiens cDNA
7122	168536	27190		3.43	2.0E-21	AU337701	EST; HUMAN	QYHV704681-0019-019 NIH-1MCF-5L Homo sapiens cDNA clone IMAGE:1570255 5'
8412	18287			1.88	2.0E-21	BE350127.1	EST; HUMAN	HG00291-01 NCL CGAP, Jd13 Homo sapiens cDNA clone IMAGE:3442265 3' similar to contig MERS29 b2
8635	185051	28776		1.92	2.0E-21	BE378269.1	EST; HUMAN	601980658EFT-1 NIH-1MCF-5S Homo sapiens cDNA clone IMAGE:3931085 5'
8635	185051	28771		1.92	2.0E-21	BE378269.1	EST; HUMAN	601980658EFT-1 NIH-1MCF-5S Homo sapiens cDNA clone IMAGE:3931085 5'
8425	190712			5.13	2.0E-21	AF174815.1	NT	Homo sapiens putative 8-hydroxyguanine DNA glycosylase gene, complete cds
1235	111412	20994		1.68	1.0E-21	AA557657.1	EST; HUMAN	nt046021-01 NCL CGAP, Jd13 Homo sapiens cDNA clone IMAGE:1042718 similar to contig MERS29 b2
1381	118513			2.48	1.0E-21	AB012641.1	EST; HUMAN	AF082121-01 Banskti 1B11.1 Banskti 1B11.1 Homo sapiens cDNA clone IMAGE:2152343 3'
5907	12851			2.43	1.0E-21	AB012641.2	EST; HUMAN	AF082121-01 Banskti 1B11.1 Homo sapiens cDNA clone IMAGE:2152343 3'
6289	16114	26589		4.43	1.0E-21	AJ223104.1	EST; HUMAN	QYHV704681-0019-019 NIH-1MCF-5L Homo sapiens cDNA clone IMAGE:1583535 3' similar to QYHV704681-01
8021	17871			1.49	1.0E-21	EF730383	NT	Homo sapiens SET domain and matrix transposase fusion gene (SETMAR) mRNA
4312	14209	23993		2.65	9.0E-22	AJ702438.1	EST; HUMAN	T24205.1 NCL CGAP, Kidd11 Homo sapiens cDNA clone IMAGE:15726204 3' similar to T24205.1 NCL CGAP, Kidd11 Homo sapiens cDNA clone IMAGE:15726204 3'

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Probe	Exon	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
	ORF SEQ ID NO:	Expression Signal ID NO:			
6670	19447	256061	1.44	2.0E-22 W394065.1	EST; HUMAN
5747	16655	257633	3.39	2.0E-22 BFB0216.1	EST; HUMAN
7695	17448	27661	1.49	2.0E-22 A726822.1	EST; HUMAN
7940	17450	27710	7.07	2.0E-22 A7176315.1	EST; HUMAN
7840	17450	27711	7.04	2.0E-22 A7176315.1	EST; HUMAN
8974	18779	28071	1.85	2.0E-22 AW1488961.1	EST; HUMAN
9009	15804	25200	1.78	2.0E-22 AW1652890.2	NT
1835	17133	21606	1.78	2.0E-22 AW1651717.1	EST; HUMAN
2839	12433	223033	2.65	1.0E-22 U68971.1	Human familial Alzheimer's disease 3 (SM2) gene, complete cds
12884	16411	23084	1.74	1.0E-22 BE084687.1	NT
6653	15342	26569	1.49	1.0E-22 BE084687.1	EST; HUMAN
3823	15159	23233	0.64	8.0E-23 AF195349.1	EST; HUMAN
6241	15165	24935	1.48	8.0E-23 AF195349.1	EST; HUMAN
5241	15165	24936	1.48	8.0E-23 AF195349.1	EST; HUMAN
3271	15162	24937	1.48	7.0E-23 AFV47246.1	EST; HUMAN
4764	14649	24438	1.04	7.0E-23 AFV47246.1	EST; HUMAN
3387	13274	28256	3.51	5.0E-23 AFV47246.1	EST; HUMAN
4771	14071	23846	1.62	6.0E-23 AF198333.1	NT
9140	18999	25338	1.99	6.0E-23 AF221669.1	NT
9146	18999	25339	1.99	6.0E-23 AF224609.1	NT
8241	16021	21297	2.18	6.0E-23 AL020130.1	EST; HUMAN
5341	16202	26068	3.61	5.0E-23 U262071.2	NT
5781	16454	25797	5.0E-23 U726818.1	NT	
6002	15427	26707	3.04	5.0E-23 U726818.1	NT
					Hom sapiens chromosome 21 segment HS21C049
					Hom sapiens mammary beta A, lysozyme (MAMBA) gene, and ubiquitin-conjugating enzyme E2D 3
					(UBE2D3), NAD(P)H:dehydrogenase family A2b (MGAE2A), melanoma antigen family A1/2 (MGAE1A), NAD(P)H:dehydrogenase family A2b (MGAE2B), melanoma antigen family A3 (MGAE3A), calretinin (UBXN1) genes, complete cds
					Hom sapiens mammary beta A, lysozyme (MAMBA) gene, and ubiquitin-conjugating enzyme E2D 3
					Hom sapiens olfactory receptor (P2RY116) gene, partial cds
					Hom sapiens olfactory receptor (P2RY116) gene, partial cds

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Probe SEQ ID NO:	Exon ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6890	19400	20953	3.66	3.0E-23 AA130165.1	EST_HUMAN	255g08r1 Scores: pregnant, uterus. NIH/PU/Homo sapiens cDNA clone IMAGE:5035685 5' similar to contains MER291C MER291 element: H2C2
7259	17233	27435	3.61	3.0E-23 T00654.1	NT	Human endogenous retrovirus element: H2C2
7258	17233	27446	3.61	3.0E-23 T00654.1	NT	Human endogenous retrovirus element: H2C2
950	10586	20442	4.39	2.0E-23 A285880.1	NT	Human caprine KIAA0651 gene (parilifl), X73 gene and LZTFL1 gene
1126	12644		2.77	M65270.1	EST_HUMAN	Human matric Zeta protein (MGP) gene, complete cds
2765	12627	22619	1.08	2.0E-23 P22205	SWISSPROT	TEMASINA-X-PRECURSOR (TN-X)-(EXABRACHION-LIKE)
2765	12627	22520	1.08	2.0E-23 P22205	SWISSPROT	TEMASINA-X-PRECURSOR (TN-X)-(EXABRACHION-LIKE)
3225	12245		1.48	2.0E-23 C20P8.1	EST_HUMAN	4871_x1_NL_C20P8_P228 Homo sapiens cDNA clone IMAGE:143767 3' similar to TR:Q13857 Q13827
3055	15589		3.03	2.0E-23 BE165980.1	EST_HUMAN	MER37 TRANSPONSOB ELEMENT, COMPLETE CONSENSUS SEQUENCE ; MER37-HT0487-150200-113-q01 HT0487 COMB1
3894	138104	23589	2.98	2.0E-23 H56931.1	EST_HUMAN	MR3-1 Scores: fetal liver epith. TNFL. Homo sapiens cDNA clone IMAGE:205416.6
3894	13804	23590	2.98	2.0E-23 H56931.1	EST_HUMAN	Y1620211 Scores: fetal liver epith. TNFL. Homo sapiens cDNA clone IMAGE:205416.6
6895	18475		5.62	2.0E-23 AF280107.1	NT	Homo sapiens cyclooxygenase P450 polypeptide 7 (CYP3A3) gene, partial cds, complete cds, and cytochrome P450 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) gene, partial cds, and cytochrome P450 5 (CYP3A5) gene, partial cds
9131	18858		2.80	2.0E-23 M32658.1	NT	Human alcohol dehydrogenase gamma subunit (ADH5) gene, exon 1
6896	18216		2.47	2.0E-23 AF095890.1	NT	Human receptor type 1 G-protein coupled receptor beta locus, TCDB:V7534.2 to TCDB:V7532 region
9774	18970		2.02	2.0E-23 AL135831.1	EST_HUMAN	Homo sapiens OVAR31 OVARI. Homo sapiens cDNA clone OARC:1006468 5'
4428	14323	24110	1.8	1.0E-23 AL169262.2	NT	Homo sapiens chromosome 21 segment H821G52
4857	14543		4.49	1.0E-23 AL163210.2	NT	Homo sapiens chromosome 21 segment H821G10
6034	15927		2.91	1.0E-23 BE78471.1	EST_HUMAN	60128545PF_NHL_MGIC_44_Homo sapiens cDNA clone IMAGE:2008953.5'
6895	16744	20837	4.54	1.0E-23 AA448097.1	EST_HUMAN	Zn262001 Scores: testis. NIH/PU/Homo sapiens cDNA clone IMAGE:7626985 5' similar to contains P1 R5:12
510	10481		1.88	9.0E-24 A683213.1	EST_HUMAN	P1 R5:1 positive element ; ab7505.5 t Strategene field retina 937/202 Homo sapiens cDNA clone IMAGE:8522758 3' similar to TR:E19822_E19822 CA PROTEIN ;
4549	14442	24225	1.08	8.0E-24 P23269	SWISSPROT	Olfactory receptor-like protein 3
4549	14442	24226	1.08	8.0E-24 P23269	SWISSPROT	Olfactory receptor-like protein 3
3193	13708		1.31	7.0E-24 AW637854.1	EST_HUMAN	Q7D-D047-1-AW637854.1
6890	10263		2.4	6.0E-24 A5001421.1	NT	Macaca fasciata mRNA for Testis-specific protein Y (TSFY), complete cds
820	10748	20595	10.14	6.0E-24 AL163246.2	NT	Homo sapiens chromosome 21 segment H821G49
3889	13810	23565	7.18	5.0E-24 A220045.1	NT	Hom sapiens 950 kb contig between AMI_1 and CBRI_1 on chromosome 21 22 segment 33
5511	15526	25009	3.06	4.0E-24 AA544718.1	EST_HUMAN	Y13105.5 t NCLGAP_Gene 1 Homo sapiens cDNA clone IMAGE:1085529 3' similar to SW:POL_MLV/RK F1787 POL POLYPEPTIDE

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Protein ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8594	18270	28522		2.03	3.E-26 AAU79013.1	EST_HUMAN	inf3010.51 NCL_CGap_P1 Homo sapiens cDNA clone MAGE:91531 similar to contains L1:L1
1325	11232	21088		3.37	2.E-25 503216S	NT	Human ciliopathy gene family like 1 (TBL1) mRNA
2263	12144	22043		7.11	2.E-25 DE88016.1	EST_HUMAN	6716520f1 NIH_3T3 Human cells cDNA clone MAGE:3673087 5'
2801	12370	22243		4.32	2.E-25 P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16
4096	13966	23773		1.91	2.E-25 P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16
4096	13966	23774		1.91	2.E-25 P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16
7028	17480	27770		2.25	2.E-25 AL449573.1	EST_HUMAN	AL449573 Homo sapiens cDNA (Strand(s) GS) Homo sapiens cDNA clone DR726-594-10313 5'
361	10377	20198		1.61	2.E-25 AL040229.1	EST_HUMAN	DR-2p-34H373.7 - 132 (synonym: thc3) Homo sapiens cDNA clone DR726-594-10313 5'
1228	11136	121		1.0E-25	9635487	NT	Human endogenous retrovirus: complete genome
2284	12284	22156		2.79	1.0E-25 C000509	SWISSPROT	ATP SYNTHASE LIPID-BINDING PROTEIN P2 PRECURSOR (ATPASE PROTEIN 9) (SUBUNIT C)
4753	14638	24425		2.71	1.0E-25 BE_162737.1	EST_HUMAN	PM-H70454-08610002-002-006 HTM454 Homo sapiens cDNA
8056	19400	26198		2.65	1.0E-25 AA828290.1	EST_HUMAN	Im5611.1 NC_ COAR_ Kidz Homo sapiens cDNA clone MAGE:387749 3'
6516	15486	26953		3.15	1.0E-25 AA700797.1	EST_HUMAN	2B604.51 Scores: real_low real_low NmRH19W Homo sapiens cDNA clone MAGE:384822 3' similar to contains PR0.5 TTR5 repetitive element;
8337	18214	28467		3.5	1.0E-25 US0163.1	NT	Human ciliopathy gene MAGE-82, MAGE-83 (MAGE-83), MAGE-84 (MAGE-84), and MAGE-85
9143	18607	28793		1.45	1.0E-25 D14547.1	NT	(MAGE-81) Genes: complete cds
9143	18607	28797		1.45	1.0E-25 D14547.1	NT	Human DNA_SINE repetitive element
9914	19359	21517		1.32	1.0E-25 X51758.1	NT	Human lypd1-lmpmgbnlpb1 consister region complex (gemline)
2433	12310	22206		1.94	9.0E-26 AL163219.2	NT	Human sapiens chromosome 21 segment H321C018
9010	19501	1.73		9.0E-26 AL163205.2	NT	Human sapiens chromosome 21 segment H321C005	
5492	18411			1.56	8.0E-26 D14547.1	NT	Human DNA_SINE repetitive element.
1559	11464	21182		1.44	7.0E-26 AF03328.1	NT	Human sapiens X-linked anhidriotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat
3668	13808	23594		1.35	7.0E-26 X89211.1	EST_HUMAN	H.capsule DNA for endogenous retroviral like element
4067	13969	23745		2.03	7.0E-26 AW340163.1	EST_HUMAN	Inf2010x1 Stargate neurofibromatosis NF1 gene MAGE:2900366 3'
8023	16731			7.99	7.0E-26 AA15989.1	EST_HUMAN	zN03084.1 Stargate neurofibromatosis NF1 gene MAGE:548983 5'
9700	16290			1.33	7.0E-26 AW854589.1	EST_HUMAN	zN03084.1 Stargate neurofibromatosis NF1 gene MAGE:548983 5'
2178	12065	21067		2.44	6.0E-26 AF026208.1	NT	Human sapiens chromosome 9 duplication of the T cell receptor beta locus and lymphoigenic gene families
3302	13223	23025		1.42	6.0E-26 AA26131.1	EST_HUMAN	#Z2104.1 Stargate neurofibromatosis (NF1) Homo sapiens cDNA clone MAGE:345271 5'
6532	16740	26333		4.98	6.0E-26 AL163210.2	NT	Fome sapiens chromosome 21 segment H321C010

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Probe Seq ID No.	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1160	11073	20918	3.33	5.0E-26	AI708235.1	EST_HUMAN	WP5808_x1_BurstReadsAndIPI_PRL86 Homo sapiens cDNA clone IMAGE:2319519 3' similar to ascs3908.x1_BurstReadsAndIPI_PRL86 Homo sapiens cDNA clone IMAGE:2319519 3' similar to
1160	11073	20919	3.33	5.0E-26	AI708235.1	EST_HUMAN	WP5808_x1_BurstReadsAndIPI_PRL86 Homo sapiens cDNA clone IMAGE:2319519 3' similar to WP5808_x1_Searce_NSF_SW_UT_Pn_P_S1 Homo sapiens cDNA clone IMAGE:2365986 3' similar to
9875	18435		1.71	8.0E-26	AI761426.1	EST_HUMAN	WP5808_x1_Searce_NSF_SW_UT_Pn_P_S1 Homo sapiens cDNA clone IMAGE:2365986 3' similar to
1525	11430		1.52	4.0E-26	AA32648.1	EST_HUMAN	ES1733446 Embryo, 12 week, II Homo sapiens cDNA 5' end
7476	17283		3.77	4.0E-26	7055760	EST_HUMAN	Homo sapiens upstream binding transcription factor, RNA polymerase I (UBTF), mRNA
8033	17044	20194	3.74	4.0E-26	EF526157.1	EST_HUMAN	[DR-Zp-4340665_1] Homo sapiens cDNA clone DCF2-p341053 5'
1968	11853	21740	1.5	3.0E-26	AL045895.2	EST_HUMAN	[DR-Zp-4340665_1] Homo sapiens cDNA clone DCF2-p341053 5'
1987	11980		2.41	3.0E-26	AA118805.1	EST_HUMAN	zr3008.11 Stratagene neurofibromin (NF2/ANM) 8317234 Homo sapiens cDNA clone IMAGE:549843 5'
3712	13825	23408	1.19	3.0E-26	AA152404.1	EST_HUMAN	C056374 THYROID RECEPTOR INTERACTOR:
3712	13825	23409	1.19	3.0E-26	AA152404.1	EST_HUMAN	zr30010.1 Stratagene colon (#537204) Homo sapiens cDNA clone IMAGE:588427 5' similar to TR:G085374
6131	15978	26814	4.35	3.0E-26	BP24548.8	EST_HUMAN	G085374 THYROID RECEPTOR INTERACTOR:
8108	17903		2.18	3.0E-26	AF029340.5	EST_HUMAN	601184963571 NIH 3T3
8853	18955	28951	1.98	3.0E-26	AF075651.1	EST_HUMAN	Homo sapiens (MLL ALL) gene, exons 1-3, and partial cds
8853	18955	28952	1.99	3.0E-26	AV75651.1	EST_HUMAN	QV25_P100124-000124-005_P10012 Homo sapiens cDNA C056374 THYROID RECEPTOR INTERACTOR:
8870	18691	28954	10.55	3.0E-26	AA583173.1	EST_HUMAN	nm3705.51 NCI OGAP_5G5 Homo sapiens cDNA clone IMAGE:10806057 3' similar to contains ORFH
696	10900	20418	5.61	2.0E-26	AI652822.2	NT	Homo sapiens chromosome 21 segment H2910B2
1825	11722		3.35	2.0E-26	AI030909.2	EST_HUMAN	DKFZp569J71_51 (synonym: Hill2) Homo sapiens cDNA clone DKFZp569J71_51
3193	13118	22624	4.28	2.0E-26	A83504.1	NT	M_musculus mRN 1 or antisense phosphoprotein, PEA-15
8135	18023		2.88	2.0E-26	DB7875.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
8549	18420	28600	4.55	2.0E-26	AB014412.1	EST_HUMAN	tk080401_x1 NCI OGAP_Gata3 Homo sapiens cDNA clone IMAGE:21854163 similar to contains Alu repetitive element/locus element MER20 MER20 repetitive element:
6727	18537		1.82	2.0E-26	AF595066.1	NT	Homo sapiens HAC1 genes 1 region
9252	18852		2.19	2.0E-26	AB317859.1	NT	Homo sapiens mRNA 16r
132	10100	186207	4.26	1.0E-26	BE170371.1	EST_HUMAN	Q1V4-HT0538-00001-23-d12/H10583 Homo sapiens cDNA
2001	11864	21786	1.39	1.0E-26	AL039563.2	EST_HUMAN	DKX2p-343H1910_1T_431 (synonym: tk080401_x1 NCI OGAP_Gata3 Homo sapiens cDNA
2516	12590	22282	0.84	1.0E-26	BE154905.1	EST_HUMAN	MAFB-BN0111245650-005_g07_Eln0114 Homo sapiens cDNA
2654	12521		16.70	1.0E-26	AF261985.1	NT	Homo sapiens glycosidase delta-3-phosphatidylcholinase (GAPBP1) mRNA, complete cds

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Probe	Exon	ORF Seq ID	Top Similar BLASTe Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
Seq ID No:	NO:	SEQ ID NO:	Signal	No.		
6199	16034	18145	2.75	1.0E-36	BE160390_1	EST_HUMAN
8295	18145	18145	3.17	1.0E-36	AU304947_1	EST_HUMAN
9493	19371	18145	1.84	1.0E-38	HE50303_1	EST_HUMAN
7254	17342		3.11	9.0E-27	U83165_1	NT
8027	19470	28118	3.48	9.0E-27	PE4296	SWISSPROT
9013	18512		3.97	9.0E-37	BF445595_1	EST_HUMAN
10	9996	15797	3.09	8.0E-37	AU314462_1	EST_HUMAN
645	10485		4.13	8.0E-27	AL652272_2	NT
1395	11300	21168	18.87	8.0E-37	AN162731_1	EST_HUMAN
1395	11300	21169	18.87	8.0E-37	AN162731_1	EST_HUMAN
2121	12009	21909	0.98	8.0E-27	AW584776_1	EST_HUMAN
3148	13075	22874	3.31	8.0E-27	PJ2298	SWISSPROT
3309	13230	23035	0.91	8.0E-27	AF181687_1	NT
6165	15122		3.12	8.0E-27	BE26850_1	EST_HUMAN
6198	20688		4	8.0E-27	BA4970_1	EST_HUMAN
1301	17186	27390	1.68	8.0E-27	AW837570_1	EST_HUMAN
7910	17186	27391	1.68	8.0E-27	AV857750_1	EST_HUMAN
6058	10022		1.22	7.0E-27	ZD7064_1	NT
5023	14896		2.09	7.0E-27	AW626172_1	EST_HUMAN
8132	18020		4.22	7.0E-27	AW727351_1	EST_HUMAN
9631	19204		2.07	7.0E-27	AV727356_1	EST_HUMAN
8108	17699		0.21	6.0E-27	AB200567_1	EST_HUMAN
7877	17721		2.92	5.0E-27	BH560614_1	EST_HUMAN
6646	15949	20590	1.64	4.0E-27	BF760614_1	EST_HUMAN

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
66551	16392	28985	1.23	4.0E-27	AF078779.1	NT	Rattus norvegicus putative four repeat for channel mRNA, complete cds
88891	18989	21782	2.58	4.0E-27	AF02211.1	NT	H. sapiens DNA for a degeneronuclease inhibitor-like element
1905	11889	28519	5.42	3.0E-27	AF06585.1	NT	H. sapiens DNA for a potential ligand-binding protein
4174	14074	28519	1.27	3.0E-27	BE071924.1	EST_HUMAN	PAN-B07627-560100-001-NFL Human caprine cDNA
5278	16200	24976	5.13	3.0E-27	AA077705.1	EST_HUMAN	7634-C08 Chromosome 7 Fetal Brain cDNA Library Human caprine cDNA clone
7385	17343	27548	2.68	3.0E-27	AF035327.1	EST_HUMAN	6014583317F1 NIH_3T3 Cell Line Human caprine cDNA clone IMAGE:3682008_S
36	10023	18920	7.96	3.0E-27	AF054167.1	NT	Human caprine delta NAC mRNA, complete cds
1053	11749		18.55	2.0E-27	AF069346.1	EST_HUMAN	n1016.51 NC_1 COGAP_P11 Homo sapiens cDNA clone IMAGE:1000699 similar to pM17895.60S
3071	12998		10.27	2.0E-27	AF066917.1	EST_HUMAN	hs5112_x1 Scores: NFL_T GBCC ST_Homo sapiens cDNA clone IMAGE:2075879_3 similar to TR-0703040
3187	13112	22916	1.43	2.0E-27	AF111672.2	NT	Human caprine lam dimerization protein gene, partial cds; cdc2 gene, complete cds; and unknown gene
3187	13112	22917	1.43	2.0E-27	AF111672	NT	Human caprine lam dimerization protein gene, partial cds; cdc2 gene, complete cds; and unknown gene
38944	13852	23827	1.09	2.0E-27	AF069358.1	NT	Rattus norvegicus voltage-gated sodium channel mRNA, complete cds
6712	18652	26782	1.5	2.0E-27	AF085641.1	EST_HUMAN	inf2807_x1 NC_1 COGAP_UtH_Homo sapiens cDNA clone IMAGE:2426288_S
7538	17296		2.3	2.0E-27	AA351277.1	EST_HUMAN	inf4805_x1 NC_1 COGAP_Thy_Homo sapiens cDNA clone IMAGE:843737 similar to contains L13_L1 repetitive element
7768	17618	27847	1.22	2.0E-27	MT8509.1	EST_HUMAN	EST07038 Fetal brain, Striatum/cerebellum cortex (Graf6)2006 Human caprine cDNA clone HEBC-07
7768	17618	27848	1.22	2.0E-27	MT8509.1	EST_HUMAN	EST07038 Fetal brain, Striatum/cerebellum cortex (Graf6)2006 Human caprine cDNA clone HEBC-07
8324	18201	28469	2.80	2.0E-27	AL1212985.1	EST_HUMAN	AL1212985_MAMMATH_Homo sapiens cDNA clone IMAGE:009748_S
8778	11749		20.82	2.0E-27	AF069346.1	EST_HUMAN	inf161_x1 NC_1 COGAP_P11 Homo sapiens cDNA clone IMAGE:1000699 similar to pM17895.60S
4229	10374		1.86	1.0E-27	AL163246.2	NT	Human caprine chromosome 21 segment HS321_C046
980	10963	20749	1.41	1.0E-27	AB0265808.1	NT	Human caprine DNA, DLECH to ORC1L4 gene region, section 1/2 (DLECH, ORC1L3, ORC1L4 genes, complete cds)
5643	15648	25972	6.31	1.0E-27	AF095655.1	NT	Human caprine Retina-derived POU-domain factor-1 (RPE-1) mRNA
6105	16569	26136	2.2	1.0E-27	F30158.1	EST_HUMAN	HSRP200461_HM3 Homo sapiens cDNA clone s4000005C10
7005	16569	26137	2.2	1.0E-27	F30158.1	EST_HUMAN	HSRP200461_HM3 Homo sapiens cDNA clone s4000005C10
7065	16852	27075	1.72	1.0E-27	AB007023.1	NT	HSRP200461_HM3 Homo sapiens cDNA clone s4000005C10
7194	11071		1.80	1.0E-27	AB007023.1	EST_HUMAN	HSRP200461_HM3 Homo sapiens cDNA clone s4000005C10
7609	17487	27672	2.68	1.0E-27	D87446.1	NT	Human mRNA for (KIAA0250 gene, partial cds
8649	18751	28148	3.14	1.0E-27	AF110985.1	NT	Bos taurus leptothrix 3 splice variant beta mRNA, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
136	10109			2.32	9.0E-28	ENSG000002184390.1	EST_HUMAN SECRETED NEUROVIN-III_HUMAN_CPRE-CURSOR [3]_TR-Q07280 (TR-Q07280 : TR-007313 : 5'
308	10270	20069		3.01	9.0E-28	ENSG000002182380.1	EST_HUMAN U01280260 (NT_017871) Homo sapiens cDNA clone NT_017871_Human genome element MAR22 repetitive element ;
5118	14866	24790		1.21	9.0E-28	ENSG000002180115.1	EST_HUMAN lo(1269-1) NCI CGAP_U2_Homo sapiens cDNA clone IMAGE-2178809 3' similar to contains OFR11 OFRR repetitive element ;
5118	14869	24781		1.21	9.0E-28	ENSG000002180115.1	EST_HUMAN lo(1269-1) NCI CGAP_U2_Homo sapiens cDNA clone IMAGE-2178809 3' similar to contains OFR11 OFRR repetitive element ;
9093	18666			3.74	9.0E-28	ENSG00000218775895.1	EST_HUMAN Q5Z1H0_HUMAN_00004_Homo sapiens cDNA clone IMAGE-21782911 3' similar to
9416	16692			1.97	8.0E-28	ENSG000002186797.1	EST_HUMAN au31H0_XL_Schmidlin_Fab3055 PROTEIN :contains element MAR22 repetitive element ;
1164	11077	20922		7.54	7.0E-28	ENSG000002187250.1	EST_HUMAN TR-006302_060302_KIAA0585 cDNA clone IMAGE-2178809 5'
8523	18395	28669		2.64	7.0E-28	ENSG000002188411.1	EST_HUMAN Homo sapiens gamma-delta T cell receptor Y78AA1 element 1 (GGT(L1))_mRNA
6053	18836			1.44	7.0E-28	ENSG000002187534.6	EST_HUMAN J735346_CBM_Homo sapiens gamma-delta T cell receptor Y78AA1 element 1 (GGT(L1))_mRNA
3887	13984	23670		1.27	6.0E-28	ENSG000002180966.1	EST_HUMAN Homo sapiens mRNA for KIAA0966 protein, complete cds
3887	13984	23671		1.27	6.0E-28	ENSG0000021809673.1	EST_HUMAN Homo sapiens mRNA for KIAA0966 protein, complete cds
6873	10232			2.73	6.0E-28	ENSG0000021840562.1	EST_HUMAN #000303_NCI CGAP_GCB1_Homo sapiens cDNA clone IMAGE-2265340 5' similar to contains Aliu repetitive element contains element P1TR5 repetitive element ;
316	10277			3.08	5.0E-28	ENSG000002182005.1	EST_HUMAN w016072_XL_CGPB_Pant1_Homo sapiens cDNA clone IMAGE-2465692 3' similar to contains THIR b1 THIR repetitive element ;
3827	13836	23616		1.65	5.0E-28	ENSG000002187022.1	EST_HUMAN y86H01.1 Scores places N1251P_Homo sapiens cDNA clone IMAGE-14645 5'
2884	12465	22247		1.42	4.0E-28	ENSG000002184599.1	EST_HUMAN xx332050_X_NCI CGAP_Kbt1_Homo sapiens cDNA clone IMAGE-2265650 3' similar to SWV-GS65_HUMAN
3070	12607	22788		3.39	4.0E-28	ENSG000002184900.1	EST_HUMAN D08370_GOU_Genes_.
6336	16189	26359		1.69	4.0E-28	ENSG000002188941.1	EST_HUMAN REVERSE TRANSCRIPTASE HOMOLOGUE (HUMAN);
6230	18119			4.29	4.0E-28	ENSG0000021802908.1	EST_HUMAN qip6810.1 Scores :beta_NTH_Homo sapiens cDNA clone IMAGE-1755019 3' similar to qip6810.1 LINE-1
8371	18248			53.6	4.0E-28	ENSG0000021803241.1	EST_HUMAN Falls casts QAFDT_mRNA for glyceraldehyde-3-phosphate dehydrogenase, complete cds
8398	16150	26359		2.94	4.0E-28	ENSG00000218168641.1	EST_HUMAN qip6810.1 Scores :beta_NTH_Homo sapiens cDNA clone IMAGE-1755019 3' similar to qip6810.1 LINE-1
1262	11169			1.89	3.0E-28	ENSG000002185682.1	EST_HUMAN Homo sapiens metallopeptidase like, diaminopeptidase, cytosine-rich protein 2 epsilon (ADAM22) mRNA, complete cds
7124	17001	27163		2.19	3.0E-28	ENSG000002187545.1	EST_HUMAN MIR3-1170713-00300473-008_H70713_Homo sapiens cDNA
8399	16163	28450		1.64	3.0E-28	ENSG0000021853685.1	EST_HUMAN Homo sapiens MHC class I region

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9459	19108	19884	2.44	3.0E-28	Af831981.1	EST_HUMAN	W5807_x1 NCI CGAP Lym12 Homo sapiens cDNA clone IMAGE_2410985 3' similar to contains Alu repetitive element containing element HCG repetitive element;
83	10067	11062	6.45	2.0E-28	HE062167.1	EST_HUMAN	TCG_BT025_x2/B0300/B019-c05_B1 Homo sapiens cDNA
1148	20965		10	2.0E-28	Y11107.3	NT	Homo sapiens gene for fringosin B 4 subunit, exons 8-11
2427	12804	22200	2.1	2.0E-28	AB484834.1	EST_HUMAN	q035056_x1 NCI CGAP_LuS Homo sapiens cDNA clone IMAGE_19_04633 3' similar to contains L1_L2 L1 repetitive element;
5821	15727		4.28	2.0E-28	AF212905.1	EST_HUMAN	6018141987_NHG_C_5d Homo sapiens cDNA clone IMAGE_4649751 5'
7228	17379		5.86	2.0E-28	AV672905.1	EST_HUMAN	EST_387564 MAGE sequences, MAGE_Homo sapiens cDNA
8887	18998	26962	2.27	2.0E-28	AF224069.1	NT	Homo sapiens immunophilins, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D_3 (UBE2D3) genes, complete cds
1483	11368	21233	2.42	1.0E-29	CD38044.1	NT	Human gene for Ah-receptor, exon 7-9
2173	12050	21983	1.55	1.0E-29	BF333236.1	EST_HUMAN	QY1_BT025_1-20005-386_b03_B10821 Homo sapiens cDNA
2650	12561	22407	1.03	1.0E-29	AF009955.1	NT	Homo sapiens ubiquitin C-terminus (UBC) mod., Y factor (UTY) mRNA, alternative transcript 2, complete cds
6567	15467		4.48	1.0E-29	BF333236.1	NT	Homo sapiens similar to ribosomal protein L12 (Rasleine) (LC05509), mRNA
6575	15555		3.02	1.0E-28	BF333236.1	NT	Homo sapiens ubiquitous protein FLJ10698 (FLJ_09898) mRNA
7346	17214	27413	2.85	1.0E-28	AA208744.1	EST_HUMAN	EST_730615 HOC cell line (mammalian to liver in mouse) II Homo sapiens cDNA 6 end similar to similar to retroviral LTR
7676	17528	27753	5.15	1.0E-28	4756_451_NT	NT	Homo sapiens gamma-guanidyltransferase like activity 1 (GGT1A1), mRNA
7678	17529	27754	5.15	1.0E-28	4756_451_NT	NT	Homo sapiens gamma-guanidyltransferase like activity 1 (GGT1A1), mRNA
9405	18840		3.95	1.0E-28	AA054182.1	EST_HUMAN	Z51501_x1 Scores 0.12 Score 0.12b-HTR Homo sapiens cDNA clone IMAGE_3891448 5'
9797	18951	24896	1.43	1.0E-28	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21_C047
9855	18598		2.6	9.0E-29	AV669097.1	EST_HUMAN	hZ5605_x1 Scores: N.E., T_G6C_S1 Homo sapiens cDNA clone IMAGE_2878266 3'
1584	11466	21349	0.91	7.0E-29	AW669190	SWISSPROT	HYPOTHETICAL PROTEIN_50 PROTEIN
9842	18410		6.08	7.0E-29	AW66947.1	EST_HUMAN	ES_1737852 MAGE sequences, MAGE_Homo sapiens cDNA
580	10518	20235	6.52	6.0E-29	AB489748.1	EST_HUMAN	Ratlike homologous mRNA for 45 kDa secretory protein, partial
9053	18028		3.98	6.0E-29	BE504048.1	EST_HUMAN	W5807_x1 NCI CGAP_LuS Homo sapiens cDNA clone IMAGE_2410985 3' similar to TR-O15475
6438	16076	18028	1.80	6.0E-29	BF333236.1	EST_HUMAN	RC5_UT0062_x1 (015475 UNNAMED) D1 HCV-H PROTEIN_Bm25 Homo sapiens cDNA clone IMAGE_4390076 5'
4828	14807		0.98	5.0E-29	AL163203.2	NT	Hom sapiens chromosome 21 segment HS21_C03
7008	18945		7.61	5.0E-29	AW669541.1	EST_HUMAN	RC3_UT00991_1-1703000_01_c12_010061 Homo sapiens cDNA
3194	13119		1.98	4.0E-29	AT762367.1	EST_HUMAN	EN_15020_x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHITBC_cn16_c02 random
5666	15568		8.95	4.0E-29	BE164930.1	EST_HUMAN	CY1_BT0471_280300_121_d05_010471 Homo sapiens cDNA

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7070	27146	14214	259897	4.71	JG1698_1	NT	Human 60 kD heat shock protein gene, complete cds
4317	27146	14214	259897	1.45	3.0E-29 JG0242297_1	EST_HUMAN	Human cDNA clone for <i>E-polymerase-binding protein in synapses</i> , complete cds
4626	14514	24501	1.31	3.0E-29 JG332286_1	EST_HUMAN	QIV-B702321-12C903-038-hs.05 B1 (0821) Homo sapiens cDNA	
7070	16547	27148	2.07	3.0E-29 JG38044_1	NT	Human gene for Ah-receptor, exon 7-9	
7362	17220	27429	1.6	3.0E-29 AW303317_1	EST_HUMAN	x07703_x1 Scores: INF_L_GBC_ST Homo sapiens cDNA clone MAGE:2813405 3' similar to contig Alu repetitive element/contaminant MER19.12 MER19 repetitive element;	
7482	17220	164	3.0E-29 AL65246_2	NT	Human cDNA clone chromosome 21 segment HS21OD46		
8921	18459	20728	2.22	3.0E-29 AA403033_1	EST_HUMAN	x07201_x1 Scores: Mest, NMT Homo sapiens cDNA clone MAGE:7283869 5' similar to TRG13357/68	
9243	18659	20728	1.61	3.0E-29 DB8892_1	NT	Human HUMLM5 mRNA & tRNA, complete cds	
484	10427	20240	1.43	2.0E-29 AF084869_1	NT	Human cDNA clone protein Ric-Cd3 gene, complete cds	
484	10427	20241	1.43	2.0E-29 AF084869_1	NT	Human cDNA clone protein Ric-Cd3 (amino acid), complete cds	
1618	11421	21278	6.12	2.0E-29 JG83504_1	EST_HUMAN	w0710_x1 NC_01203AP_1 Human cDNA clone IMAGE:24925663 3' similar to TR_O15646 O15646	
1518	11421	21279	6.12	2.0E-29 JG83504_1	EST_HUMAN	HEV-E ENVELOPE GLYCOPROTEIN	
4182	14522	23852	2.03	2.0E-29 AL65208_2	NT	w06810_x1 NC_01203AP_1 Human cDNA clone MAGE:24925653 3' similar to TR_O15646 O15646	
61750	15668	26785	1.49	2.0E-29 JG83504_1	EST_HUMAN	Human cDNA clone chromosome 21 segment HS21OD86	
6461	16668	25765	1.43	2.0E-29 AL806416_1	EST_HUMAN	g01_x1 Scores: INF_L_GBC_ST Homo sapiens cDNA clone MAGE:2359860 3' similar to contains element MER6 repetitive element;	
7474	17334	27539	2.95	2.0E-29 AL163248_2	NT	Human cDNA clone chromosome 21 segment HS21OD46	
7474	17334	27540	2.05	2.0E-29 AL163248_2	NT	Human cDNA clone chromosome 21 segment HS21OD46	
7679	17720	27973	3.39	2.0E-29 AL163248_2	NT	Human cDNA clone chromosome 21 segment HS21OD48	
7679	17720	27974	3.39	2.0E-29 AL163248_2	NT	Human cDNA clone chromosome 21 segment HS21OD48	
8804	18618	18807	1.96	2.0E-29 AW389701_1	EST_HUMAN	QIV-Q10632-0630006-155-d01 O10032 Homo sapiens cDNA	
9004	18807	1.73	2.0E-29 AL163227_2	NT	Human cDNA clone chromosome 21 segment HS21OD27		
7105	16682	27174	5.41	1.0E-29 AW38980_1	EST_HUMAN	RC1-H4N0032-223030-021-604 Homo sapiens cDNA clone HS21OD46	
5698	16871	25985	3.04	9.0E-30 AA761215_1	EST_HUMAN	nz20047_x1 NC_01203AP_1 GCB1 Homo sapiens cDNA clone MAGE:1288332 3' similar to contains MER4 repetitive element;	
9132	16889	1.5	9.0E-30	11422745_1	EST_HUMAN	Homo sapiens specific regulated transporter-like (ZRTL) mRNA	
5615	16721	26890	8.81	9.0E-30 P08888_1	EST_HUMAN	HS-C25/G65 normalized brain cDNA clone c-23105	
6812	16891	26890	3.37	9.0E-30 AA38873_1	EST_HUMAN	EST175717 Thomas J Homo sapiens cDNA 3' end similar to EST containing O family repeat	
7039	16916	27105	3.53	8.3E-30 A1657072_1	EST_HUMAN	P17_13_B11_tum2 Homo sapiens cDNA 3'	

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Table 4.
Single Exon Probes Expressed in Heart

Probe Seq ID No:	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal	Most Similar BLAST E Value	Top Hit Assessment No.	Top Hit Database Source	Top Hit Description
1499	11403		1.16	7.0E-30	X51/155.1	EST_HUMAN	PM#-BT0724-150400-000-411 BT0724-Human sapiens cDNA Human lambda-immunoglobulin constant region complex (germline)
1549	11454		0.95	1.0E-30	X51/155.1	NT	Human mRNA for integrin alpha subunit, complete cds
1735	11637	21655	1.26	6.0E-30	D5603/0.1	NT	Q7050-EN017-250402-21-442 HUMAN sapiens cDNA Human lambda-immunoglobulin constant region complex (germline)
3153	13077	22878	2.41	9.0E-30	BE500/26.1	EST_HUMAN	Human lambda-immunoglobulin constant region complex (germline)
9915	11454		3.15	9.0E-30	X57/1755.1	NT	Igq2q3.x1 NCI CGAP_CLL1 Human sapiens cDNA clone IMAGE:2116276 3' similar to contains Ali repetitive element
3821	13840	23620		31.23	5.0E-30	Alt809862.1	EST_HUMAN
6225	19322			7.35	6.0E-30	U6793/1.	Human acetylase hydrolase (ACO2) gene, exon 7
8231	18141			3.55	6.0E-30	AL1622/78.2	NT
8485	18368	28932		6.68	5.0E-30	AL1632/20.2	NT
8495	18358	28533		6.58	5.0E-30	AL1632/10.1	Human sapiens chromosome 21 segment HS21 C010
2006	11985	21890		1.64	4.0E-30	AV6327/47.1	EST_HUMAN
2048	11985	21881		1.64	4.0E-30	AV1032/20.0	Q74570-03-090/200-080-006 D70045 Human sapiens cDNA CMV-S1-T01/81-09/110-03-05-08 S1(16) Human sapiens cDNA
7102	17039	27231		1.49	4.0E-30	AV78/2488.1	EST_HUMAN
1134	11048			1.71	3.0E-30	AL335851.1	EST_HUMAN
3607	13861	23395		0.91	3.0E-30	AL1288983.1	NT
8559	18410	28975		2.38	3.0E-30	PA10/5	Human sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
8559	10593	20411		1.18	2.0E-30	AV1867/31.5.	EST_HUMAN
1088	10894			2.32	2.0E-30	FB9898.1	HS22SF051 normalized infant brain cDNA Human sapiens cDNA clone 231055
1454	11959	21234		5.91	2.0E-30	BE115877.1	EST_HUMAN
2693	12568	22438		10.97	2.0E-30	BE70522/2.1	EST_HUMAN
2859	12616	22609		0.38	2.0E-30	AF114165.1	NT
3771	13633	23419		2.11	2.0E-30	AW20581/1.1	EST_HUMAN
4688	14554	24346		1.72	2.0E-30	BE298645.1	EST_HUMAN
4688	14554	24347		1.72	2.0E-30	BE298645.1	EST_HUMAN
6936	16844	27056		3.46	2.0E-30	C18639.1	EST_HUMAN
7019	15866	27065		1.55	2.0E-30	BE570617.1	EST_HUMAN
7019	15866	27066		1.55	2.0E-30	BE570617.1	EST_HUMAN
7143	17593	27814		3.3	2.0E-30	AW971568.1	EST_HUMAN
							7676/12.1 NCI CGAP_Luc4 Human sapiens cDNA clone IMAGE:3284962 3' similar to SWDHS1_HUMAN_P31040 SUCCINATE DEHYDROGENASE (UBIQUINONE) FLAVOPROTEIN SUBUNIT PRECURSOR...
							6011168630F1 NIH_MGC_17 Human sapiens cDNA clone IMAGE:3028439 5' 6011168630F1 NIH_MGC_17 Human sapiens cDNA clone IMAGE:3028439 5'
							C16839 Human placentae cDNA (Frithjof's) Human sapiens cDNA clone GEN:5700201'
							7676/12.1 NCI CGAP_Luc4 Human sapiens cDNA clone IMAGE:3284962 3' similar to SWDHS1_HUMAN_P31040 SUCCINATE DEHYDROGENASE (UBIQUINONE) FLAVOPROTEIN SUBUNIT PRECURSOR...
							EST 7383657 MAGE resequences, MAGE_Homo sapiens cDNA

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Table 4

Single Exon Proteins Expressed in Heart

Proteo Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) HI BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7802	17652	27859	4.47	2E-30	AW470791.1	EST_HUMAN	hs34d6.x1 NCI_CGAP_Kid1 Homo sapiens cDNA clone IMAGE:2875409 3' similar to contain THR b3 T-HR repetitive element; C18935 Human placenta cDNA clone GEN-57RCG01 5'
2914	10249	20069	10.22	1E-30	C18959.1	EST_HUMAN	NB04CA11 Sorensen_NBL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910991 3' similar to contains ICB020411 Sorensen_NBL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910991 3' similar to contains UEF1.15 MERIT_MERIT repetitive element; UEF1.15 MERIT_MERIT repetitive element;
527	10469	20281	1.6	1E-30	AW468097.1	EST_HUMAN	hs77608.5.1 Stratagene lung #637210 Homo sapiens cDNA clone IMAGE:3658599 3'
699	10632	20487	2.92	1E-30	AL165203.2	EST_HUMAN	CHR220562 Chromosome 22 evon Homo sapiens cDNA clone IMAGE:451961 5'
2165	12052	21683	3.24	1E-30	AA643177.1	EST_HUMAN	hs02022500f1 NCI_CGAP_Binet7 Homo sapiens cDNA clone IMAGE:451961 5'
2413	12280	22167	2.57	1E-30	BF341726.1	EST_HUMAN	Homo sapiens methyltransferase like-2-associated protein (MNPBP), mRNA, NT
2973	13600	22659	1.03	1E-30	BB00091	EST_HUMAN	ES188688 HGP_cel (the (mammatis) in liver in mouse) II Homo sapiens cDNA 3 and 5 end
3615	12443	22738	0.93	1E-30	AA315015.1	EST_HUMAN	661006032f1 NIH_IGC_18 Homo sapiens cDNA clone IMAGE:460054 5'
6545	18403	26952	2.32	1E-30	BF183593.1	EST_HUMAN	CHR220562 Chromosome 22 evon Homo sapiens cDNA clone IMAGE:7222 5'
9733	19815		5.1	1E-30	HS55620.1	EST_HUMAN	HS4056FG02 normalized infant brain cDNA Homo sapiens cDNA clone e-05003 3'
7013	16690		2.04	9E-31	238283.1	EST_HUMAN	Homo sapiens myeloid inhibitory protein (IPI), mRNA
1050	10977	20820	1.64	6E-31	BF15208.2	NT	Homo sapiens Chromosome 21 segment HS2/C008
2982	12242		5.14	8E-31	AL15208.2	NT	Homo sapiens Chromosome 21 segment HS2/C008
694	10627		1.72	7E-31	AF223897.1	EST_HUMAN	EST84656 Colorectal carcinoma IV Homo sapiens cDNA 5' end
2633	12500	22382	1.7	7E-31	BE22857.1	EST_HUMAN	hs05a11.x1 NCI_CGAP_Luz24 Homo sapiens cDNA clone IMAGE:3182012 3'
2633	12500	22383	1.7	7E-31	BE22857.1	EST_HUMAN	hs05a11.x1 NCI_CGAP_Luz24 Homo sapiens cDNA clone IMAGE:3182012 3'
9553	16136	23272	2.56	7E-31	AF25755.1	NT	Human lambdoidimucophilin constant region (variable) gene
3125	13539		2.79	8E-31	AF223891.1	NT	Homo sapiens calcium channel alpha 1 subunit (CACNA1E) gene, exons 7-9, and partial exon, alternative spliced
6739	16618		3.68	6E-31	AF223891.1	NT	Homo sapiens NRCC10 cDNA clones 1 region
8120	18038	26295	2.11	6E-31	AL119015.1	EST_HUMAN	AU19105f1 HEK293T Homo sapiens cDNA clone HEK293A1029050 5'
9191	15629	23551	1.98	6E-31	AV372959.1	EST_HUMAN	RC05_B70077_0912_B70077_Homo sapiens cDNA clone IMAGE:3910524 5'
9319	15341		1.78	6E-31	BE188498.1	EST_HUMAN	66103300f7f1 NIH_IGC_72 Homo sapiens cDNA clone IMAGE:3910524 5'
185	10157	18673	2.85	5E-31	MN0694.1	NT	Homo sapiens type I DNA topoisomerase gene, exon 8
185	10157	18974	2.85	5E-31	MN0694.1	NT	Homo sapiens type I DNA topoisomerase gene, exon 8
6915	16793		1.21	5E-31	BF065650.1	EST_HUMAN	7400804-2 NCI_CGAP_Q03 Homo sapiens cDNA clone IMAGE:3449479 3' similar to TRQ138397 Q138377 SIMILAR TO POCO ELEMENT; contains L1,L1 repetitive element;
991	10519		3.78	4E-31	AJ217735.1	NT	Homo sapiens Ig pseudosubunit region segment (I2)
1594	11498	21357	1.04	4E-31	O104743	SWISSPROT	POLYPEPTIDE NACETYLGALACTOSAMINYLTRANSFERASE (PROTEIN-UDP ACETYL GALACTOSAMINYLTRANSFERASE) (UDP-GALNAc-POLYPEPTIDE_N-
1775	11674		2.59	4E-31	AL165280.2	NT	Acetylgalactosaminyltransferase (GALNAc-T1) (GALNAc-T1)

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal Value	Most Similar (Top) NC BLAST E Value	Top NIH Accession No.	Top Hit Database Source	Top Hit Descriptor
2759	12021	19160	1.38	4.0E-31	5730038 NT	Human sapiens SET domain and matrix transposase fusion gene (SETMAR) mRNA	
9004	19160		1.52	4.0E-31	1145273 NT	Human sapiens gene for acetyl receptor type IB, complete cds	
9718	15259		1.38	4.0E-31	AB005681.1	Human sapiens gene for acetyl receptor type IB, complete cds	
2550	12423	22314	1.42	3.0E-31	6009891 NT	Human sapiens SEOC3, endolysinic reductase component (S cerevisiae) like (SEOC3), mRNA	
6841	16204	26346	0.03	3.0E-31	4829853 NT	Human sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, B (16kD, AS-1) (NDUFB8) mRNA	
6425	16204	26448	1.38	3.0E-31	1142039 NT	Human sapiens hypocalcin, 21 deamino Hs1 (C2006	
6745	16024	195	0.95	3.0E-31	AL052002.2	Human mRNA for tenascin L-chain, complete cds	
7325	17976	27955	2.86	3.0E-31	D14523.1	NT	
8028	17820	28167	2.01	3.0E-31	P11174	SWISSPROT	
8483	18399		0.36	3.0E-31	BF035327.1	EST_HUMAN	60145853TF1 NIH_3T3
1875	11717	21647	1.83	3.0E-31	AV38717.1	EST_HUMAN	60145853TF1 NIH_3T3
2167	12054	21985	1.31	3.0E-31	AB303988.1	EST_HUMAN	QV2-LT059-11-03 T00861 Homo sapiens cDNA clone IMAGE:38620886
2262	12174	22074	2.18	2.0E-31	AL119245.1	EST_HUMAN	Q440915-1 Scores 1.0000000000000001
2291	12269	22164	4.4	2.0E-31	AA45824.1	EST_HUMAN	QK72-76/G1579_781 (synonym: Karyt) Homo sapiens cDNA clone DNF2p76/G1579_781
6502	15421	25463	3.6	2.0E-31	BE35127.1	EST_HUMAN	TR-H2 THH negative element; h00601_x1 IIC CGAP Kid13_Homo sapiens cDNA clone IMAGE:3146259 3 similar to contains MER22.53
7246	17123		1.8	2.0E-31	AA877784.1	EST_HUMAN	TR-Q15337_Q15357
7309	17185	27385	3.96	2.0E-31	BE35165.1	EST_HUMAN	TR-Q15337_Q15357
7700	17860	27774	1.27	2.0E-31	AV170948.1	EST_HUMAN	AV170948 Gu human sapient cDNA clone QM4A0757_5
7787	17847	27783	1.27	2.0E-31	AV170948.1	EST_HUMAN	AV170948 Gu human sapient cDNA clone QM4A0757_5
7787	17947	27884	2.17	2.0E-31	BE408911.1	EST_HUMAN	BE408911.1
9292	18903		2	2.0E-31	AF148512.1	EST_HUMAN	Gu human sapient cDNA clone IMAGE:3638310_5
9451	16759		1.81	2.0E-31	AY114627.1	EST_HUMAN	HA1110 Human fetal liver cDNA library Homo sapiens cDNA
16	10002	18704	6.34	1.0E-31	U63193.1	NT	Homo sapiens MAGE32 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
1640	11544	21403	2	1.0E-31	OB6371	SWISSPROT	C1F4TORY RECEPTOR 2C1
1640	11544	21404	2	1.0E-31	OB6371	SWISSPROT	OLFFACTORY RECEPTOR 2C1
1640	11544	21405	2	1.0E-31	OB6371	SWISSPROT	OLFFACTORY RECEPTOR 2C1
4555	14428	24209	1.01	1.0E-31	AL134376.1	EST_HUMAN	DNK-Ep547R8235_11 847 (synonym: hfb1) Homo sapiens cDNA clone DNK-Ep547R8235_11

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4535 14428	24210	15159	24927	1.01	AL134576.1	EST HUMAN	DKEZ647/BZ235-11647 (synonym: Kfr1) Homo sapiens cDNA clone DK/Zp547/BZ235 5'
5235 15635	25738			1.05-31	AL391075.1	EST HUMAN	MRE-570220-151289-028_1 ST0202 Homo sapiens cDNA
5728				1.87	AF048727.1	NT	Homo sapiens minisatellite oct1 repeat region
8288 81677	28411			1.05-31	AL086434.1	EST HUMAN	q212p3.1 NCI CGAP_Sm25 Homo sapiens cDNA clone IMAGE:1750709 3' similar to TRQ16565
8288 12763				0.99	SLC35F1	EST HUMAN	q212p3.1 NCI CGAP_Sm25 Homo sapiens cDNA clone IMAGE:1750709 3' similar to TRQ16565
8288 16005	28026			2.34	U58871.1	EST HUMAN	Human familial Alzheimer's disease (TOMM40) gene, complete cds
2032 11923	21815			0.95-32	AV728976	EST HUMAN	AT1728976-1TBS Homo sapiens cDNA clone IMAGE:1973834 5'
2032 11923	21815			0.95-32	AL050770.1	EST HUMAN	AL050770.1 Scores 100% over system INFLS. S1 Homo sapiens cDNA clone IMAGE:1973834 3'
4784 4639	24426			1.17	0E-32	PR52601	SWISSPROT
9268 16872				2.77	0E-32	X17283.1	NT
2702 12668	22446			0.6	0E-32	AL078104.1	EST HUMAN
6336 10222				1.5	0E-32	BE886010.1	EST HUMAN
1018 10356	20779			20.57	0E-32	AL116627.1	EST HUMAN
9116 103839				1.74	0E-32	AL165246.2	EST HUMAN
6481 16342	20510			2.82	0E-32	11432074	EST HUMAN
6482 16342	20511			2.82	0E-32	11432074	EST HUMAN
4448 10982	20213			3.4	0E-32	Y12783.1	Homo sapiens AT-binding transcription factor 1 (ATBF1). mRNA
1438 11343	21210			7.67	0E-32	AV73150.1	Homo sapiens cDNA clone IMAGE:1174072 5'
7404 17271	21477			6.73	0E-32	AV758534.1	EST HUMAN
7404 17271	21476			6.73	0E-32	AV758534.1	EST HUMAN
8207 16176	28421			8.08	3.0E-32	AA777621.1	EST HUMAN
9294 16995				3.04	3.0E-32	BE273086.1	EST HUMAN
9865 16930	24632			2.43	3.0E-32	5174574	NT
9055 15090				2.43	3.0E-32	5174574	NT
8802 18514				4.94	NT	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia 1 (fithree) (a) homolog. Translocated to 4q11.2
4783 14657	24454			0.91	0E-32	BE259613.1	EST HUMAN
5600 15008	24629			19.01	0E-32	238153.1	NT
5800 16000	25930			18.01	0E-32	238153.1	NT

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6815 16894	26854		3.41	2.0E-32 AA112824.1	EST_HUMAN	zr766c08_1r1 Stratagene HeLa cell z3.3/7216 Homo sapiens cDNA clone IMAGE:563160 5'	
6815 16894	26855		3.41	2.0E-32 AA112824.1	EST_HUMAN	zr766c08_1r1 Stratagene HeLa cell z3.3/7216 Homo sapiens cDNA clone IMAGE:563160 5'	
6908 19285	26115		1.61	1.0E-32 AV786446.1	EST_HUMAN	AV786446_2B Homo sapiens cDNA clone CB18405 5'	
6908 19285	26115		1.61	1.0E-32 AV786446.1	EST_HUMAN	AV786446_2B Homo sapiens cDNA clone CB18405 5'	
3095 19885	26175		1.61	1.0E-32 BE743298.1	EST_HUMAN	BE743298_1r1 NIH_3T3 9L MCF-7 9L Human hepatoma cDNA clone IMAGE:3834433 5'	
6198 15658	26090		7.04	1.0E-32	11430786 NT	Homo sapiens chromosome 9 open reading frame 9 (Open reading frame 9), mRNA	
6907 16874	27095		5.18	1.0E-32 AA720547.1	EST_HUMAN	AA720547_2A1 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR:13 THR repetitive element:	
3435 13352			4.98	9.0E-33 BE32712.1	EST_HUMAN	BE32712_1C04 L224_Human sapiens cDNA clone IMAGE:3182216 3' similar to TRC03500 C03539	
5867 15773			4.19	9.0E-33 AF222301.1	NT		
7103 16880	27172		1.98	9.0E-33 BE5412350.1	EST_HUMAN	BE5412350_1r1 Homo sapiens cDNA clone IMAGE:4156870 5'	
8177 18065			5.89	9.0E-33 AL161280.2	NT		
54 10041	19850		2.08	7.0E-33	60373786 NT	Homo sapiens short-chain alcohol dehydrogenase family member (HEP-Z7) mRNA	
54 10041	19851		2.08	7.0E-33	60373786 NT	Homo sapiens short-chain alcohol dehydrogenase family member (HEP-Z7) mRNA	
2115 12004	21602		2.71	7.0E-33 AB09115.1	EST_HUMAN	(to 12008_1r1) CGA_U42 Homo sapiens cDNA clone IMAGE:78693 3' similar to contains OFR:t1 CFR repetitive element:	
2612 12480			8.4	7.0E-33 AV730056.1	EST_HUMAN	AV730056_1r1 Homo sapiens cDNA clone HTFAN-056 5'	
2800 11573	21438		1.78	7.0E-33 AV971507.1	EST_HUMAN	AV730056_1r1 Homo sapiens cDNA clone HTFAN-056 5'	
3224 13128			12.85	7.0E-33 AV971507.1	EST_HUMAN	EST383350_MAGE_1 isoform 1, mRNA	
6223 18087	26539		3.9	7.0E-33 BE541229.1	EST_HUMAN	BE541229_1r1 Homo sapiens cDNA clone IMAGE:4156870 5'	
5573 18441	28709		2.15	7.0E-33 AV971506.1	EST_HUMAN	EST383350_MAGE_1 isoform 1, mRNA	
9274 18878	26322		3.43	7.0E-33 AA1601416.1	EST_HUMAN	AA1601416_1r1 Homo sapiens cDNA clone IMAGE:1100881 3' similar to contains L1_M1 L1 repetitive element:	
3070 13965	27059		0.85	6.0E-33 AL162295.2	NT		
6688 16865	27059		13.52	6.0E-33 AA1601416.1	EST_HUMAN	AA1601416_1r1 Homo sapiens cDNA clone IMAGE:1100881 3' similar to contains L1_M1 L1 repetitive element:	
7049 16826	27117		2.57	6.0E-33 AA1601416.1	EST_HUMAN	AA1601416_1r1 Homo sapiens cDNA clone IMAGE:1100881 3' similar to contains L1_M1 L1 repetitive element:	
7750 17900	27822		1.24	6.0E-33	6755059 NT	Mus musculus SRY-box containing gene (Sox8), mRNA	
7750 17900	27823		1.24	6.0E-33	6755059 NT	Mus musculus SRY-box containing gene (Sox8), mRNA	
1730 17840			1.78	5.0E-33 BE372651.1	EST_HUMAN	QV1-PT06_10070-27-412 F1(019_Homo sapiens cDNA)	
1828 11735			1.18	5.0E-33 11141884 NT	HomO	HomO sapiens solute carrier family 7 (SLC5A7), mRNA	
1826 11752	26526		1.37	5.0E-33	4507208 NT	HomO sapiens spermidine synthase (SPNM) mRNA	
1856 11752	27127		1.37	5.0E-33	4507208 NT	HomO sapiens spermidine synthase (SPNM) mRNA	

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2229	12111		1.3	6.0E-33	AL1652856.2	NT	Human papilloma virus E6-associated protein, Angelman syndrome (UBE3A), mRNA
9082	18956		1.32	5.0E-33	AL1652073.1	NT	Human papilloma virus E6-associated protein, Angelman syndrome (UBE3A), mRNA
1112	11908		3.28	4.0E-33	AL1652071.1	NT	Human papilloma virus E6-associated protein, Angelman syndrome (UBE3A), mRNA
2078	21961		1.77	4.0E-33	4795897	NT	Homologous RAS oncogene family (RAS1) mRNA
2370	12250		7.39	4.0E-33	AAB26821.1	EST_HUMAN	ab61511.1 Strategate lung carcinoma IMAGE:844317 similar to human RAS oncogene family (RAS1) mRNA
2495	12373		22295	3.77	4.0E-33	AL1652102.2	NT
4382	14278		1.83	4.0E-33	AW295346.1	EST_HUMAN	UH-BG-04-05-UU-1 NCI_CGAP_Sab-Homo sapiens cDNA clone IMAGE:31210493
5318	15239		20.94	4.0E-33	AA053055.1	EST_HUMAN	3771ab8.11 Striatal colon (#637894) Homo sapiens cDNA clone IMAGE:5100365 similar to gb0X12571, mpa1 HETEROGENEOUS NUCLEIC ACID RIBONUCLEOPROTEIN A1 (HUMAN)
9407	19810		29.02	1.72	4.0E-33	11452656	NT
1073	10959		4.49	3.0E-33	BE350127.1	EST_HUMAN	IN9901.1x1 NCI_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:31462865 similar to contain MER29.3
1074	10959			3.4	3.0E-33	BE350127.1	EST_HUMAN
2400	12721		1.48	3.0E-33	AV647355.1	EST_HUMAN	MER29 repetitive element; AV647355 GLC Homo sapiens cDNA clone GlCRCF08.3'
69	10003		2.33	2.0E-33	AI160169.1	EST_HUMAN	ab77950.1x1 Soeas, fed, [leaf] Ht-H19/Ht-Homo sapiens cDNA clone IMAGE:17052043 similar to contains ORF, it is FR repetitive element; AI160169.1
4322	14219		4.27	2.0E-33	AF050391.1	EST_HUMAN	NR0-LHT0405-100300-202-008 HT0405 Homo sapiens cDNA clone NR0-LHT0405-100300-202-008
4911	14790		5.1	2.0E-33	AAB26883.1	EST_HUMAN	ab51011.1 Striatal lung carcinoma #772B Homo sapiens cDNA clone IMAGE:8443985 similar to ab200734.1cds1 TUBULIN BETA-4 CHAIN (HUMAN);
5026	14899		1.73	2.0E-33	11421532	NT	Homologous to human tubulin beta-4 gene (TUBB4), mRNA
55698	18775		1.73	2.0E-33	11421532	NT	Homologous to human tubulin beta-4 gene (TUBB4), mRNA
55698	24609		1.81	2.0E-33	AI277462.1	EST_HUMAN	gb6601.1x1 Soeas, fed, liver, spleen, NH-MPr, ST Homo sapiens cDNA clone IMAGE:18801613
7281	17158		1.8	2.0E-33	AI0522565.1	EST_HUMAN	gb:AG06396 TRANSLATIONAL INITIATION FACTOR 2 BETA SUBUNIT (HUMAN); gb:AG06396
8	18904		1.44	1.0E-33	AF003261.1	NT	Homologous to human endoplasmic reticulum glycoprotein gene (ERDA), even 2 and flanking repeat
86317	187502		2.02	1.0E-33	AW998318.1	EST_HUMAN	gb73-BH0047-23000-102-0005 BN0047_E home sapiens cDNA
86321	18729		5.33	1.0E-33	U000222.1	NT	Cytosolic dynein (DMD) gene, exons 7, 9 and 9, and partial cds
9655	19116		1.22	1.0E-33	AI05227191.1	EST_HUMAN	wob8062.1x1 NCI_OGAP_Kid11 Homo sapiens cDNA clone IMAGE:2462410.3

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal Value	Most Similar (Top) HR BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9723	6994		3.04	1.0E-33	AF003528.1	NT	Homo sapiens X-linked arthrodysplasia protein gene (EDA), exon 2 and flanking repeat regions
9754	152778	28229	1.34	AV727890.1	EST_HUMAN	AV727890.1 (TC) Homo sapiens cDNA clone [ITCNC1] 5'	
9827	165069		2.06	0.0E-31	AJ277255.1	NT	Homo sapiens Yq nucleotide/terminal region, segment 1/2
1427	11832	21198	1.98	7.0E-34	JQ108465.1	EST_HUMAN	yaf16507.1 Scores best filter spleen (NFL) Homo sapiens cDNA clone IMAGE:103320 5'
4630	160405		3.08	1.0E-34	AB128865.1	EST_HUMAN	Human G2 protein mRNA, partial cds
4631	104065	20225	1.46	0.0E-34	UH10691.1	NT	Human G2 protein mRNA, partial cds
9153	16803	28540	1.44	6.0E-34	UJ10691.1	NT	No nucleotide D202 has specific (red) 1-gene
1837	11734		2.23	5.0E-34	UO36565.1	NT	Homo sapiens Nhp3-binding protein Nhp3B (LOC51729) mRNA
4863	14869	24651	4	5.0E-34	UQ0883.1	NT	Human splicing factor SRp55 (SRp-55) mRNA, complete cds
7144	17021	21215	1.18	5.0E-34	AF078778.1	NT	Ratius nonnei putative 1 repeat for channel mRNAs, complete cds
8048	17837	26196	2.12	5.0E-34	AB037866.1	NT	Homo sapiens mRNA for SUA4455 protein, partial cds
8578	18445		2.01	5.0E-34	AL16209.2	NT	Nucleotide TRANSLOCATOR_3 (ANT_3)
1983	11848	21735	2.11	4.0E-34	AB04687.1	EST_HUMAN	te4602_NCL_Homo sapiens cDNA clone [IMAGE:2249164 3]
2887	12662	22141	0.68	8.0E-34	BF028207.1	NT	Homo sapiens Hypothetical protein BFJ028207 (JLJ10869) mRNA
8462	16905		4.81	3.0E-34	BF03327.1	EST_HUMAN	0014586511F1 NH_104C_66 Homo sapiens cDNA clone IMAGE:39262066 5'
1488	11933	21254	0.56	1.0E-34	P-2236	SWISSPROT	ADP-ATP CARRIER PROTEIN_LIVER ISOFORM T2 (ADPATP_TRANSLOCATE_3) /ADENINE NUCLEOTIDE TRANSLOCATOR_3 (ANT_3)
3021	13335	23320	1.46	1.0E-34	AF003528.1	NT	Homo sapiens chondromucoidase 21 segment HST-C009 regions
3979	13889	23681	0.78	1.0E-34	AY003697.1	NT	Homo sapiens WNT3 precursor (WNT3) mRNA, complete cds
3079	13986	23962	0.76	1.0E-34	AY003697.1	NT	Homo sapiens WNT3 precursor (WNT3) mRNA, complete cds
4381	14277		4.02	1.0E-34	BE07141.1	EST_HUMAN	CCB70506-240404-07-005 (S70506) Homo sapiens cDNA
4920	14799		0.86	1.0E-34	AW845706.1	EST_HUMAN	MRC-C70068-28698-002-011 CT0068_Homo sapiens cDNA
5731	16539	28743	1.69	1.0E-34	BE874002.1	EST_HUMAN	60114844301-1 NH_104C_69 Homo sapiens cDNA clone IMAGE:38869699 5'
5731	16539	28744	1.99	1.0E-34	BE874002.1	EST_HUMAN	CMH-H0194-461059-022-006 H10193_Homo sapiens cDNA
7165	17032	21726	3.67	1.0E-34	AV398451.1	EST_HUMAN	DKF-25644-1553_7_664 (synonym: H10193) Homo sapiens cDNA clone DK-25644-1553_5
7501	17442	27688	6.89	1.0E-34	AL036955.1	EST_HUMAN	TG077006_11 NC_1 CGAP_G11 Homo sapiens cDNA clone IMAGE:2998787 5'
8746	19307		2.92	1.0E-34	AL063502.1	EST_HUMAN	Hom sapiens prohibitin (PHB) mRNA
3564	13508	23296	1.26	9.0E-35	6031100	NT	fasd200_x1_NCL_CGAP_Kai11 Homo sapiens cDNA clone IMAGE:23265134 3' similar to TR-01981/2
219	1C189		24.25	8.0E-35	BF585967.1	EST_HUMAN	CF791241C1GL_CEROL_KINASE (OTA_
1703	11804	24745	3.3	8.0E-35	BF585967.1	EST_HUMAN	

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar BLAST Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
							nas34ab1x1 NCI CGAP_Kid1 Homo sapiens cDNA clone IMAGE:32861343 similar to TR075912
1703	11004	21476	3.3	8.0E-35 BF886937.1	EST_HUMAN	079e12 DIACYLGLYCEROL KINASE IOTA; ;	
4781	14646	24455	3.09	8.0E-35 BF886937.1 NIH_3T3 MCGC_18 Homo sapiens cDNA clone IMAGE:40403245	EST_HUMAN	09129a46bf1 NIH_3T3 MCGC_18 Homo sapiens cDNA clone IMAGE:36085135	
8075	17766	26227	3	8.0E-35 BF886937.1 EST_HUMAN	EST_HUMAN	09246241 NIH_3T3 MCGC_42 Homo sapiens cDNA clone IMAGE:53008603	
9295	18069		3.49	8.0E-35 BF886937.1 EST_HUMAN	EST_HUMAN	Hom sapiens phosphatidylinositol glycan, class L (PIGL), mRNA	
6905	15811	25637	1.52	1.0E-35	EST_HUMAN	al153703.61 Homo sapiens cDNA clone IMAGE:3009973	
1351	11266	21154	1.28	6.0E-35 AAJ75115.1 EST_HUMAN	Hom sapiens zinc finger protein 205 (ZNF205) mRNA		
1925	11220	21659	1.78	6.0E-35	6005975 NT	Hom sapiens triplex functional domain (PF00717) (TRI-D) mRNA	
8610	16490	28576	3.6	6.0E-35	6005971 NT	Hom sapiens triplex functional domain (PF00717) (TRI-D) mRNA	
7688	17548	27771	2.7	6.0E-35 AB037768.1 NT	Hom sapiens mRNA for KIAA1366 protein, partial cds		
1681	11583	21454	2.29	5.0E-35 X63392.1 NT	Hom sapiens immunoglobulin kappa light chain variable region	L14	
4311	14208	23652	2.2	5.0E-35 AF022085.1 NT	Hom sapiens cdk2 kinase (CDK2), protein coded by glucocorticoid-inducible pseudogenes, and melanin genes, complete cds, melanin pseudogene and glucocorticoid-inducible pseudogenes		
6791	16540		3.14	5.0E-35 BE860592.1 EST_HUMAN	091431984f1 NIH_3T3 MCGC_72 Homo sapiens cDNA clone IMAGE:39172295		
6778	16658	20848	2.18	5.0E-35 AF020765.1 EST_HUMAN	09350c15.11 Source: India SWY246 HUMAN Cc2539 HYPOPTICAL PROTEIN KIAA246; ;		
6779	16558	20849	2.18	5.0E-35 AF020765.1 EST_HUMAN	09350c5.11 Source: India NIH_3T3 MCGC_18 Homo sapiens cDNA clone IMAGE:8374483 similar to		
8517	18389		3.42	5.0E-35 AA007786.1 EST_HUMAN	09441211 Source: Italy SWY246 HUMAN Cc2539 HYPOPTICAL PROTEIN KIAA246; ;		
1415	11321	21198	14.91	4.0E-35 BE257907.1 EST_HUMAN	09101671ef1 NIH_3T3 MCGC_16 Homo sapiens cDNA clone IMAGE:33934056		
					0945a07.11 Source: Italy SWY246 HUMAN Cc2539 HYPOPTICAL PROTEIN KIAA246	similar to	
1776	11675	21552	5.1	4.0E-35 Hs1163.1 EST_HUMAN	0945a07.11 Source: Italy SWY246 HUMAN Cc2539 HYPOPTICAL PROTEIN KIAA246	similar to	
5042		46114	1.23	4.0E-35 BE409102.1 EST_HUMAN	091300705f1 NIH_3T3 MCGC_21 Homo sapiens cDNA clone IMAGE:335354015		
6280	16144		1.82	4.0E-35 BE350127.1 EST_HUMAN	091629f1x1 NCI CGAP_Kid13 Homo sapiens cDNA clone IMAGE:31482953 similar to contains MER28b3		
6957	16835	27050	6.84	4.0E-35 AL0404505.1 EST_HUMAN	09127a541.148 f1 f432		
1561	11466	21324	9.63	3.0E-35 BE286182.1 EST_HUMAN	091125260f1 NIH_3T3 MCGC_3 Homo sapiens cDNA clone IMAGE:33459565		
2283	12167		2.42	3.0E-35 AF224462.1 NT	Hom sapiens phosphatidylserine scramblase 1 gene, complete cds		
4793	14078	24465	1.00	3.0E-35 BF7229402.1 EST_HUMAN	MRI_1N0045_3080610_501 TR004046 HCN1 complete cds		
5275	15197	24971	22.73	3.0E-35 BF435100.1 EST_HUMAN	09621H7 F-BOX PROTEIN FB2; ;		
5275	15197	24972	22.73	3.0E-35 BF435100.1 EST_HUMAN	09621H7 F-BOX PROTEIN FB2; ;		

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 Single Exon Probes Expressed in Heart

Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No:	Expression Signal Value	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
<i>Homo sapiens calcinum channel alpha1E subunit (CACNA1E) gene, exons 7-16, and partial cds, alternatively spliced</i>							
7405	17252		1.81	3.0E-35	AF222391.1	NT	K0632F Human fetal heart Lambda ZAP-express Homo sapiens cDNA clone K99225' similar to
103	12656	19602	1.74	2.0E-35	NB8905.1	EST HUMAN	REPETITIVE ELEMENT
1171	11983	20928	1.25	2.0E-35	U11908.1	EST HUMAN	AS1 F Human heart regions cDNA clone IMAGE 11971
2171	12058	21981	5.2	1.0E-35	AB01843.1	NT	<i>Homo sapiens Gr12-associated binder 2 (GAA5571), mRNA</i>
3272	13163	22691	0.97	2.0E-35	69124590	NT	<i>Homo sapiens Gr12-associated binder 2 (GAA5571), mRNA</i>
3272	13163	22692	0.97	2.0E-35	69124599	NT	<i>Homo sapiens Gr12-associated binder 2 (GAA5571), mRNA</i>
3511	13427		0.88	2.0E-35	AB020702.1	NT	TCA8-25-4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA_Homo sapiens cDNA clone TCBApA328
3835	13747	28598	1.09	2.0E-35	BE247575.1	EST HUMAN	TCA8-25-4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA_Homo sapiens cDNA clone TCBApA328
3835	13747	28540	1.09	2.0E-35	BE247575.1	EST HUMAN	Y19a121-1 Somite fate liver spleen NHE 5' Homo sapiens cDNA clone IMAGE 2750765'
4570	14402	25401	2.55	2.0E-35	AB020702.1	EST HUMAN	C4v-B-T0701-1040-C-385-B4 B1-T071-Homo sapiens cDNA
5426	15347	25401	1.96	2.0E-35	BF-153247.1	EST HUMAN	Y4v-B-T0701-1040-C-385-B4 B1-T071-Homo sapiens cDNA
8175	18063	28312	3.72	2.0E-35	X86417.1	NT	Probes PROS-27 mRNA
9028	13193	22691	1.36	2.0E-35	69124590	NT	<i>Homo sapiens Gr12-associated binder 2 (GAA5571), mRNA</i>
9028	13193	22692	1.36	2.0E-35	69124599	NT	<i>Homo sapiens Gr12-associated binder 2 (GAA5571), mRNA</i>
9205	18635	23594	1.51	2.0E-35	BE094978.1	EST HUMAN	601168774F1 NIH 3T3 NC_70 Homo sapiens cDNA clone IMAGE 33898699 5'
9205	18636	23595	1.51	2.0E-35	BE094978.1	EST HUMAN	601168774F1 NIH 3T3 NC_70 Homo sapiens cDNA clone IMAGE 33898699 5'
9725	19204		3.97	2.0E-35	AL105210.2	NT	K0632F Human fetal heart Lambda ZAP-express Homo sapiens cDNA clone K99225' similar to
0832	12656	19002		4.17	NB8905.1	EST HUMAN	REPETITIVE ELEMENT
40	10023	19623	4.36	1.0E-35	AA63194.1	EST HUMAN	InfraR Regional genomic DNA specific cDNA Library Homo sapiens cDNA clone CR-2-1
40	10028	19828	4.38	1.0E-35	AA63194.1	EST HUMAN	InfraR Regional genomic DNA specific cDNA Library Homo sapiens cDNA clone CR-2-1
735	10667	20650	44.43	1.0E-35	AV38673.1	EST HUMAN	IL2-ST101-02-1510698-008-0127 ST010221 Homo sapiens cDNA
735	10667	20501	44.43	1.0E-35	AV38673.1	EST HUMAN	IL2-ST101-02-1510698-008-0127 ST010221 Homo sapiens cDNA
891	10617		1.16	1.0E-35	TS7947.1	EST HUMAN	SP-A44282 A44282 BETROVIRUS-LIKEATED POU POLY-PYRTEIN - HUMAN ;
2495	12869	22692	2.31	1.0E-35	7705991	NT	Hm69g1-x1 NC_1 CGAP_JG13 Homo sapiens cDNA clone IMAGE 3146259 3' similar to contains MER28.3
2740	12902	22496	1.11	1.0E-35	BE350127.1	EST HUMAN	MER28 repetitive element;
2740	12902	22497	1.11	1.0E-35	BE350127.1	EST HUMAN	Hm69d1-11 NC_1 CGAP_K13 Homo sapiens cDNA clone IMAGE 3146259 3' similar to contains MER28.3
							MER28 repetitive element;

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3104	135301	228486	1.07	2.2	1.0E-35 AV0850422.1	6006050 NT	Home sapiens transcription elongation factor B (SII), poly(A)peptide 1-like (TCEB1) mRNA
3126	13051	22848	2.2	1.0E-35 AV0850422.1	EST_HUMAN	AVE60422 GLC Home sapiens cDNA clone GLCC-E06.3'	
3128	13051	22849	2.2	1.0E-35 AV0850422.1	EST_HUMAN	AV650422 GLC Home sapiens cDNA clone GLCC-E06.3'	
4325	14222	24013	4.7	1.0E-35 7859505 NT	Nas musculus acetyl receptor interacting protein 1 (Arip1-pending), mRNA		
4325	14222	24004	4.7	1.0E-35 7860505 NT	Nas musculus acetyl receptor interacting protein 1 (Arip1-pending), mRNA		
5382	15301	231514	1.43	1.0E-35 11282626 NT	Home sapiens chromatin assembly factor 1, subunit B (gap1) (CAF1-B), mRNA		
7501	19469	21576	2	1.0E-35 AU158595.1	EST_HUMAN	AU158595 PLACES3 Home sapiens cDNA clone PLACE30000385.2.3'	
7501	19469	21579	2	1.0E-35 AU158595.1	EST_HUMAN	AU158595 PLACES3 Home sapiens cDNA clone PLACE30000385.2.3'	
8977	18769	22292	4.16	1.0E-35 AU25119.1	EST_HUMAN	Prdm11-2D11 (lumbar Home sapiens cDNA 5'	
9186	12869	22292	1.69	1.0E-35 7703994 NT	Home sapiens hypothetical protein (LOC52023), mRNA		
9207	18871	22292	1.37	1.0E-35 11418110 NT	Home sapiens caspase kinase 1, epsilon (CSNK1E), mRNA		
9620	19198	22270	2.26	1.0E-35 BE76282.1	EST_HUMAN	801168483F1 NIH 3T3 Home sapiens cDNA clone IMAGE2938985.5'	
2860	12827	22622	0.94	1.0E-35 7857075.1	EST_HUMAN	OM3-GT0315-061-239-047 Ctrt31f Home sapiens cDNA	
3080	13007	23050	4.03	1.0E-35 7857075.1	EST_HUMAN	Home sapiens C-terminal binding protein 2 (CTBP2) mRNA	
6512	16371	28548	6.04	1.0E-36 106972.1	NT	Human carboxylic antigen gene family member 12 (CGA12) gene, exons 1 and 1N	
6512	16371	28549	6.04	1.0E-36 106972.1	NT	Human carcinogenic antigen gene transferase 44 gene, exon 1	
9423	19071	28279	5.23	1.0E-36 AF052051.1	Home sapiens glutathione transferase 2 (GST2), mRNA		
1659	11854	21741	1.88	1.0E-36 7705952 NT	Home sapiens fibrillin 2 (FLNB2), mRNA		
2387	12247	6.17	1.0E-36 A035348.1	NT	Home sapiens c-12.2 gene, exon 12		
3587	13501	22820	0.91	1.0E-36 BF515101.1	EST_HUMAN	U1-BW1-1av-c-12.2-U1 NCI CEAP Sub7 Homo sapiens cDNA clone IMAGE3085042.3'	
5288	15190	24945	19.79	1.0E-36 AF43460.1	EST_HUMAN	fb1M1049 PANCREATIC SECRETORY TRYPSIN PRECURSOR (HUMAN); fb5b0b0x1 Source: NSP FB_09 OT_PAP_S1 Home sapiens cDNA clone IMAGE3096927.3' similar to SHYMA2_HUMAN	
6221	16187	28237	3.34	1.0E-36 AV780145.1	EST_HUMAN	f02252_WF-ORTIN_ALPH4A-SUBUNIT- Home sapiens cDNA clone IMAGE309782.5'	
7027	16504	27068	2.21	1.0E-36 AF208161.1	NT	Home sapiens synaptosomal-associated protein precursor, mRNA, complete cds	
8823	18646	28631	2.74	1.0E-36 A858040.1	EST_HUMAN	ME13 repetitive element:	
9621	19460	23071	1.69	1.0E-36 BE797164.1	EST_HUMAN	f029b02-1 NCI OGAP_004 Home sapiens cDNA clone IMAGE309782.5'	
133	16923	22478	6.69	1.0E-36 BE3571735.1	Home sapiens Xq pseudobosomal region; segment 1/2		
2722	12884	22478	7.71	1.0E-36 BE358436.1	EST_HUMAN	60128507F1 NIH 3T3 Home sapiens cDNA clone IMAGE307289.5	
3581	13475	22394	1.96	1.0E-36 AL165209.2	Home sapiens chromatin assembly factor 1, subunit B (gap1) (CAF1-B), mRNA		
4678	14594	24358	1.42	1.0E-36 5729729 NT	Home sapiens AB5-like 1 (AP15L1), mRNA		
4678	14594	24359	1.42	1.0E-36 5729729 NT	Home sapiens AB5-like 1 (AP15L1), mRNA		
9026	10107	19828	2.64	1.0E-36 A1271735.1	NT	Home sapiens Xq pseudobosomal region; segment 1/2	

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Single Exon Probes Expressed in Heart

Probe	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6318	19010	25357	2.36	5.0E-36	EE0100583.1	EST HUMAN	Homo sapiens calcium-binding protein 1 (KIA0350), mRNA
	1205	11116	20981	1.43	4.0E-36	EE0100583.1	Homo sapiens calcium-binding protein 1 (KIA0350), mRNA
1424	11320	21196	1.54	4.0E-36	P02068	SWISS-PROT	Retrovirus-related polypeptide (CONTAINS: REVERSE TRANSCRIPTASE; ENDONUCLEIC ACID)
2160	11530	21359	1.63	4.0E-36	EE0100583.1	EST HUMAN	Homo sapiens DNA clone IMAGE:3628396 5'
2175	12062	21359	1.63	4.0E-36	AW247772.1	EST HUMAN	28D020_5ftrm NIH_MGCG_19 Homo sapiens cDNA clone IMAGE:28D020_5'
3310	13231	23036	3.21	4.0E-36	EE0100583.1	EST HUMAN	601282296F1 NIH_MGCG_19 Homo sapiens cDNA clone IMAGE:304168 5'
3510	13231	23037	3.21	4.0E-36	EE0100583.1	EST HUMAN	601282296F1 NIH_MGCG_19 Homo sapiens cDNA clone IMAGE:304168 5'
5693	15902	28704	2.21	4.0E-36	EE0100583.1	EST HUMAN	Homo sapiens dihydroxyacetone phosphate kinase 2 (ACADH22), transcript variant 3, mRNA
6651	16371	28547	1.74	4.0E-36	EE0100583.1	EST HUMAN	Homo sapiens dihydroxyacetone phosphate kinase 2 (ACADH22), transcript variant 3, mRNA
7679	16866	27050	1.41	4.0E-36	D57675.1	NT	Homo sapiens DNA for antibody precursor protein, complete cds
6679	16866	27051	1.41	4.0E-36	D87675.1	NT	Homo sapiens DNA for antibody precursor protein, complete cds
8212	12323	28481	2.18	4.0E-36	AA40307.1	EST_HUMAN	2.6E+01 T1 Serine, threonine, and tyrosine kinase 1 (SPTAN1), mRNA
9334	19010	12323	1.31	4.0E-36	EE0100583.1	EST HUMAN	Homo sapiens factor of activated T-cells, cytoplasmic 2 (NFATC2), mRNA
9630	18545	10414	2.73	4.0E-36	TPA823.1	EST HUMAN	4.0E+05 TPA823.1 mRNA
681	10841	20437	2.73	3.0E-36	AA069810.1	EST HUMAN	Homo sapiens neurokinin-1 (NKP1), partial cds
2252	12136	22033	0.89	3.0E-36	7685491	NT	Homo sapiens KIAA0095 protein (KIAA0095), mRNA
4402	14287	24081	5.16	3.0E-36	10181198	NT	Mice microsatellite locus Juncophilin 1 (Juncophilin 1), mRNA
8452	18328	28954	1.78	3.0E-36	BF036327.1	EST_HUMAN	6011633171 NIH_MGCG_66 Homo sapiens cDNA clone IMAGE:3820986 5'
3132	12323	28256	2.7	3.0E-36	EE0100583.1	EST_HUMAN	6011633171 NIH_MGCG_66 Homo sapiens cDNA clone IMAGE:3342706 5'
4877	14747	24554	4.62	2.0E-36	AV003767.1	EST_HUMAN	04-0103000-2403000-174-004-0070300_Homo sapiens cDNA
6571	15291	28217	2.16	2.0E-36	EE0100583.1	EST HUMAN	Murine myosin light chain 1 (MLC1), mRNA
9667	15453	28556	3.98	2.0E-36	EE0100583.1	EST HUMAN	EE4407_1_1 Stratagene library (#317224) Homo sapiens cDNA clone IMAGE:5620565 5'
6662	15897	28559	11.82	2.0E-36	T86262.1	EST HUMAN	EE4407_1_1 Stratagene library (#317224) Homo sapiens cDNA clone IMAGE:5330565 5'
867	10793	20643	1.9	1.0E-36	EE0100583.1	EST HUMAN	RC01-H7027-131166-027 NIH_H7027_1 Homo sapiens cDNA
2098	11987	21884	0.96	1.0E-36	EE0100583.1	EST_HUMAN	RC1-H7027-131166-027 NIH_H7027_1 Homo sapiens cDNA
2098	11987	21895	0.86	1.0E-36	EE0100583.1	EST_HUMAN	RC1-H7027-131166-027 NIH_H7027_1 Homo sapiens cDNA
2155	12043	21942	1.31	1.0E-36	BF067318.1	EST HUMAN	WB7318405F1 NIH_MGCG_66 Homo sapiens cDNA clone IMAGE:4278898 5'
6752	15680	21671	5.94	1.0E-36	EE0100583.1	EST HUMAN	WB7318405F1 NIH_MGCG_66 Homo sapiens cDNA clone IMAGE:4278892 5'
8940	15520	26711	2.03	1.0E-36	AA148034.1	EST HUMAN	WB7318405F1 NIH_MGCG_66 Homo sapiens cDNA clone IMAGE:4278895 5'
6640	16520	26712	2.03	1.0E-36	AA148034.1	EST HUMAN	WB7318405F1 NIH_MGCG_66 Homo sapiens cDNA clone IMAGE:4278896 5'
7220	17097	27197	2.84	1.0E-36	BF065155.1	EST HUMAN	WB7318405F1 NIH_MGCG_66 Homo sapiens cDNA clone IMAGE:4278897 5'
7624	17164	27197	4.06	1.0E-36	BF065169.1	EST HUMAN	WB7318405F1 NIH_MGCG_66 Homo sapiens cDNA clone IMAGE:4278898 5'

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar BLAST E Value	Top Hit Acylation No.	Top Hit Database Source	Top Hit Descriptor	
8317 18194	28444	18194	3.43	1.0E-36 AV887658.1	EST_HUMAN	CMB-NNN091-140402-147-An2 NN0981 Homo sapiens cDNA clone IMAGE:3079271 5		
86966 18574	28857	18574	3.91	1.0E-36 AV1504145.1	EST_HUMAN	U1-HF-BN0-allec-039-0-U1 NIH MCF-7K Homo sapiens cDNA clone IMAGE:3079271 5		
92031 18934			3.74	1.14E-177 INT	Homo sapiens Ran GTPase activating protein 2 (RANGAP1), mRNA			
9374 19640	23505	19640	1.29	1.0E-36 11418121 INT	Homo sapiens chromosome 22 open reading frame 2 (C22orf42), mRNA			
9957 19214			3.07	1.0E-36 1L56213.2 INT	Homo sapiens chromosome 21 segment (1S21) cDNA			
6358 19371			2.89	1.0E-36 Sad1 unc-84 protein 2 (SUN2), mRNA, partial cds	Homo sapiens Sad1 unc-84 protein 2 (SUN2), mRNA, partial cds			
6358 19231	23590	19231	1.99	9.0E-57 AV007227.1	EST_HUMAN	Wb80b07-X1 NC1 CGAP_C03 Homo sapiens cDNA clone IMAGE:2564246 3'		
6368 19231	23581	19231	1.89	9.0E-57 AV007227.1	EST_HUMAN	Wb80b07-X1 NC1 CGAP_C03 Homo sapiens cDNA clone IMAGE:2564246 3'		
9462 19855			2.79	9.0E-57 AV007227.1	EST_HUMAN	Wb80b07-X1 NC1 CGAP_C03 Homo sapiens cDNA clone IMAGE:2564246 3'		
5143 15010	24781	1.38	8.0E-37 AB020864.1	EST_HUMAN	CD44 human gene cDNA clone stabilizing Human Sapiens cDNA for directional			
5213 16136			1.7	8.0E-37 BE698077.1	EST_HUMAN	CD44 human gene cDNA clone stabilizing Human Sapiens cDNA for directional		
55590 15475	20557	4.1	8.0E-37 BE360127.1	EST_HUMAN	CD44 human gene cDNA clone IMAGE:3149256 3' similar to contains MER23,b3			
55590 15475	20558	4.1	8.0E-37 BE360127.1	EST_HUMAN	CD44 human gene cDNA clone IMAGE:3149256 3' similar to contains MER23,b3			
55594 15469	205576	5.03	8.0E-37 AV7808404.1	EST_HUMAN	CD44 human gene cDNA clone IMAGE:3149256 3' similar to contains MER23,b3			
66012 16482	20670	6.25	8.0E-37 X87344.1	NT	FC1-LND0008-20100-012-005_7 Chikungunya virus cDNA			
1293 11170		2.51	7.0E-37 AL042890.1	EST_HUMAN	H_asparagine_DNA_OBA_HLA-Z1 IPP2_TAP1_LMP1_DQB2_and_RINGS8_9_13_and_14 Genes			
8140 19028	28214	6.77	7.0E-37 AL817700.1	EST_HUMAN	DKE2p43HE04227_1f_434 (synonym: ihes3) Homo sapiens cDNA clone DK2p43HE04227_1f_434			
8268 18148	20358	4.18	7.0E-37 AL836702.1	EST_HUMAN	DK2p43HE04227_1f_434 (synonym: ihes3) Homo sapiens cDNA clone DK2p43HE04227_1f_434			
9775 16592		2.48	6.0E-37 AV027723.1	EST_HUMAN	Homo sapiens Sef-unc-24 domain protein 2 (SUN2), mRNA, partial cds			
57077 15615	28716	3.37	5.0E-37 AA307123.1	EST_HUMAN	EST178035 Colorectal carcinoma (HCC) cell line Homo sapiens cDNA 5' end			
82622 18171	285717	1.56115	3.37	5.0E-37 AA307123.1	EST_HUMAN	EST178035 Colorectal carcinoma (HCC) cell line Homo sapiens cDNA 5' end		
9198 18831		4.17	5.0E-37 AF49737.1	EST_HUMAN	Homo sapiens C-nuclease/translase (2-amino-5'-ketobutyrate-Coa ligase) (GGAT), mRNA			
2374 12254	22145	2.23	4.0E-37 AA47027194.1	EST_HUMAN	25000451_5' sense -2' sense -3' sense -1' N15_E_51 Homo sapiens cDNA clone IMAGE:446975 3'			
5150 15027		1.11	4.0E-37 NB2051.1	EST_HUMAN	EST150270 WATM1 Homo sapiens cDNA clone IMAGE:446975 3'			
1970 11863	21755	2.85	3.0E-37 AL042895.1	EST_HUMAN	DK2p43HE042418_1f_434 (synonym: ihes3) Homo sapiens cDNA clone DK2p43HE042418			
1970 11863	21756	2.85	3.0E-37 AL042895.1	EST_HUMAN	DK2p43HE042418_1f_434 (synonym: ihes3) Homo sapiens cDNA clone DK2p43HE042418			
2465 12341		1.7	3.0E-37 AW911950.1	EST_HUMAN	EST1313222 MAGE gene sequences, MAGF Homo sapiens cDNA			
2556 12053		3.02	3.0E-37 AV199150.1	EST_HUMAN	EST1313222 MAGE gene sequences, MAGF Homo sapiens cDNA			

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1064 10580	20824	1.94	2.0E-37	AU131202.1	EST HUMAN	AU131202 NT2RP3 Homo sapiens cDNA clone N12RP3002165 5	
1064 10580	20825	1.94	2.0E-37	AU131202.1	EST HUMAN	AU131202 NT2RP3 Homo sapiens cDNA clone N12RP3002165 5	
1064 11816	21605	1.47	2.0E-37	AU131202.1	EST HUMAN	Homo sapiens chromosome 21 segment HS21Q047	
1064 11816	21605	1.47	2.0E-37	AU131202.1	EST HUMAN	Homo sapiens cytochrome P450, aromatic hydrocarbon 1 (CYP27A1), mRNA (polypeptide(s): poly peptide 1, isoform XXIIa; steroid 27-hydroxylase, cytochrome P450, aromatic hydrocarbon 1 (CYP27A1), mRNA)	
3878 13730	28059	5.05	2.0E-37	AU36720.1	EST HUMAN	Homo sapiens cDNA clone N12RP3002165 5 end	
6985 16565	28759	3.36	2.0E-37	BF700402.1	EST HUMAN	60116921 (77P1_NH_1) MGC_17 Homo sapiens cDNA clone IMAGE:4111408 5	
8845 18657	28945	16.4	2.0E-37	AU131202.1	EST HUMAN	Homo sapiens domain containing protein 1 isoform b (DUF1) mRNA complete cds	
9883 9403	9403	3.15	2.0E-37	AU131202.1	EST HUMAN	Homo sapiens peroxiredoxin 2 (PRDX2) homolog, L1 containing BCL2 domain (PRDX2), mRNA	
2041 11632	21628	3.91	1E-37	AU131202.1	EST HUMAN	Homo sapiens ribonuclease 3 (RNASE3) mRNA, complete cds	
3878 13769	28577	22.51	1E-37	BE872305.1	EST HUMAN	601144261091_NCL_MGC_65 Homo sapiens cDNA clone IMAGE:3852652 5	
4072 13674	28753	0.95	1E-37	BE872305.1	EST HUMAN	601144261091_NCL_MGC_65 Homo sapiens cDNA clone IMAGE:3852652 5	
4987 14737	24517	2.13	1E-37	BF371719.1	EST HUMAN	OV/GFNRI/BG-286705-518c-10_F01390_Homo sapiens cDNA	
7072 -6646	27141	2.85	1E-37	AA174406.1	EST HUMAN	221602_11_Stereoglycine neurotrophin (NSN125) Homo sapiens cDNA clone IMAGE:610056 5 similar to contains L1 (2 L1 repetitive element;	
8082 17673	28222	20.59	1E-37	W22878.1	EST HUMAN	Human semicarbazide c (HC1) processed pseudogene, complete cds	
9506 16122	28754	1.46	1E-37	BE771814.1	EST HUMAN	CAB3_F00086-40700-245_d07_F1_0006_Homo sapiens cDNA	
5530 15447	25514	3.05	9E-38	10949422	NT	Reelin non-negative multifandom symmetric polymorphic protein Flecoce (LOC95976), mRNA	
1203 11113	20939	1.95	9E-38	11439365	NT	Hctob non-negative multifandom symmetric polymorphic protein Binder 2 (LOC9571), mRNA	
2449 12526	22225	1.44	8E-38	BF346221.1	EST HUMAN	60201540101_P1_NCL_Bm67 Homo sapiens cDNA clone IMAGE:418092 5	
8568 11113	20959	1.36	8E-38	11439365	NT	Homo sapiens Grb2-associated binder 2 (GAB2), mRNA	
2135 12023	21920	1.38	7.0E-39	AV1972852.1	EST HUMAN	EST_334620_MAGE sequences, MAGL_Homo sapiens cDNA	
3005 12033	22725	1.70	6E-39	BF036033.1	EST HUMAN	601165722F1_NHL_MGC_65 Homo sapiens cDNA clone IMAGE:3853646 5	
5452 15352	25407	1.69	6E-39	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA	
6432 16552	28408	1.69	6E-39	11235144	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA	
9060 16842	28266	4.46	6E-39	AB205059.1	EST HUMAN	601165722F1_NHL_MGC_65 Homo sapiens DNA for Human P2X0, complete cds	
9542 16143	28266	6.88	6E-39	AB205059.1	EST HUMAN	EST_334620_MAGE sequences, MAGL_Homo sapiens cDNA	
710 10842	20469	1.15	5E-39	AV071651.1	EST HUMAN	Homo sapiens RIBBP gene partial), exon 8	
2404 12281	22173	1.73	5E-39	AU237740.1	EST HUMAN	601165722F1_NHL_MGC_65 Homo sapiens cDNA clone IMAGE:4074 5	
6191 10076	20276	2.42	5E-39	BE871910.1	EST HUMAN	B. taurus mitochondrial respiratory chain complex II mRNA, complete cds	
113 10192	19509	2.56	4E-39	225406.1	NT	B. taurus mitochondrial respiratory chain complex III mRNA, complete cds	
113 -1002	19510	2.56	4E-39	225406.1	NT	B. taurus mitochondrial respiratory chain complex IV mRNA, complete cds	
144 11055	20897	0.82	3E-39	11439367	NT	Homo sapiens chromosome 12 open reading frame 3 (Ccr4), mRNA	
2053 11843	2053	4.39	3E-39	AF005590.1	NT	Homo sapiens homobox protein CD4 (CD4) genes, complete cds and flanking repeat regions	

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3058	13652	23440	1.11	3.0E-38	7545807	NT	Homo sapiens HIRA interacting protein 4 (cDNA-like) [H-IRI4] mRNA
3781	13693	234481	1.65	3.0E-38	P53538	SWISSPROT	SS172 PROTEIN
4513	14406	0.85	3.0E-38	BE27501.1	EST_HUMAN	601157635141_NL-Myc-21 Homo sapiens cDNA clone IMAGE:3504272 5'	
6630	19459	290183	7.17	3.0E-38	AL165300.2	NT	Homo sapiens chromosome 21 segment cDNA clone IMAGE:35121C100
6878	16337	285004	7.64	3.0E-38	BT738684.1	EST_HUMAN	CMT1A-1407181_Homo sapiens cDNA [y885bc4-11] Socave nerve membrane 2b1bM Homo sapiens cDNA clone IMAGE:249775 5'
7025	16602	270704	1.78	3.0E-38	HB564.1	EST_HUMAN	[y885bc4-11] Socave nerve membrane 2b1bM Homo sapiens cDNA clone IMAGE:249775 5'
7723	17037	1.58	3.0E-38	HB564.2	EST_HUMAN	Homo sapiens chromosome 21 segment cDNA clone IMAGE:249775 5'	
441	19832	21120	1.41	2.0E-38	AL165248.2	NT	Homo sapiens chromosome 21 segment cDNA clone IMAGE:249775 5'
1358	11264	21390	2.6	2.0E-38	5002097	NT	Homo sapiens Sh173 (Suppressor of mit 3, yeast) homolog 2 (m7TSH2), mRNA
1627	11531	21381	1.66	2.0E-38	AAA497353.1	EST_HUMAN	zv_93d001.11 Scores over tanno NIHOT_Homo sapiens cDNA clone IMAGE:707855 5' similar to SW.5MA12_RABIT_F464701_MANNOSY-L0L-GOSACCHARIDE_ALPH-A-1-2-MANNOSIDASe; zv_93d001.11 Scores over tanno NIHOT_Homo sapiens cDNA clone IMAGE:707855 5' similar to SW.5MA12_RABBIT_F464701_MANNOSY-L0L-GOSACCHARIDE_ALPH-A-1-2-MANNOSIDASe;
1627	11531	21381	1.58	2.0E-38	AAA497353.1	EST_HUMAN	zv_93d001.11 Scores over tanno NIHOT_Homo sapiens cDNA clone IMAGE:707855 5' similar to SW.5MA12_RABBIT_F464701_MANNOSY-L0L-GOSACCHARIDE_ALPH-A-1-2-MANNOSIDASe;
6841	18819		4.7	2.0E-38	BE16590.1	EST_HUMAN	MAR3-H10487-150200-115-001_H10487_Homo sapiens cDNA clone IMAGE:31861130 5' similar to TR-Q02710_Q02710
7316	17162		1.47	2.0E-38	BE165956.1	EST_HUMAN	hU009p02-X1_NCI_CGAP_Luc2_Homo sapiens cDNA clone IMAGE:31861130 5' similar to TR-Q02710_Q02710
7970	17220	26053	1.63	2.0E-38	CD5479.2	NT	Homo sapiens mRNA for KIAA0115 protein, partial cds
8781	18956	28895	6.24	2.0E-38	BE12730.1	EST_HUMAN	C72H-T0698-086160-287-045_H10569_Homo sapiens cDNA
8907	16715	29008	3.69	2.0E-38	AFL160501.1	NT	Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 6 (LGRL6) mRNA, partial cds
8907	16715	29009	3.69	2.0E-38	AFL160501.1	NT	Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 6 (LGRL6) mRNA, partial cds
9112	18077		4.05	2.0E-38	AV726988.1	EST_HUMAN	AV726988_ETC_Homo sapiens cDNA clone [11CA04] 5'
9115	18878		2	2.0E-38	AB012723.1	EST_HUMAN	Homo sapiens gene for kinase-like protein, complete cds
9412	19064	285313	3.86	2.0E-38	HB5641.1	EST_HUMAN	CH2220580_Chromosome 22 Homo sapiens cDNA clone C22_788 5'
9472	19069		2.26	2.0E-38	ST746006.1	NT	[E] beta-hexapeptide derived peptide (SPLVTVV) mRNA, partial cds
9524	19595		2.56	2.0E-38	11414268.1	NT	Homo sapiens sulfatidase gene related peptide (SPLVTVV) mRNA, partial cds
1077	10963		2.20	1.0E-38	AA0410570.1	EST_HUMAN	MER119 repetitive element;
1084	11849	21736	0.94	1.0E-38	4885286.1	NT	Homo sapiens gamma nucleotide binding protein-like 1 (GNL1) mRNA
1073	11866	21758	1	1.0E-38	76851699.1	NT	Homo sapiens KIAA0173 gene product (KIAA0173) mRNA
2446	12022	22221	1.58	1.0E-38	AfZ7051.1	NT	Homo sapiens cyclin K (CCKN) gene, exon 7

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4063	13655	23743	1.41	1.0E-38	AB037853.1	NT	Homo sapiens mRNA for KIAA1442 protein, partial cds
4223	14121	23896	0.83	1.0E-38	45603016	NT	Homo sapiens low density lipoprotein receptor-related protein 5 (LRP5) mRNA and translated products
4223	14127	23502	1.31	1.0E-38	AL165203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4228	14127	23503	1.31	1.0E-38	AL165203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4463	24173	8812	1.0E-38	8812553	NT	Homo sapiens protein FLJ10000 (FLJ10000) mRNA	
5673	15582	23662	3.61	1.0E-38	7305390	NT	Mus musculus oogonid (Oog) mRNA
5673	15582	23663	3.61	1.0E-38	7305390	NT	Mus musculus oogonid (Oog) mRNA
5678	16240	23450	2.78	1.0E-38	AB014512.1	NT	Homo sapiens mRNA for KIAA0253 protein, partial cds
7414	17281	27486	6.23	1.0E-38	AB39127.1	EST HUMAN	H06R05.1x1 NC1_CGAP_0413 Homo sapiens cDNA clone IMAGE:3140258 3' similar to MER23b_53
8254	10481	10335	2.33	1.0E-38	AL165204.2	NT	Homo sapiens chromosome 21 segment HS21C004
48	10335	10842	6.14	8.0E-39	45603012	NT	Homo sapiens ATPase H+ transporting, lysosomal (vacuolar proton pump) 1B (V-ATPase) mRNA
1372	12728	21134	1.51	8.0E-39	4752259	NT	Homo sapiens estrogen receptor-binding fragment-associated gene 9 (ERBG9) mRNA
1786	11686	20407	1.0E-38	AB32404.1	EST HUMAN	WHSR10.1x1 NC1_CGAP_0411 Homo sapiens cDNA clone IMAGE:2384491 3' similar to TR-F7590 Dp6780	
1786	11686	21482	5.54	1.0E-38	AL165227.2	EST HUMAN	POL PROTEIN
8164	18670	26539	2.12	6.0E-39	BS311629.1	EST HUMAN	Homo sapiens chromosome 21 segment HS21C004
9830	16337			2.23	8.0E-39	BE0703004.1	EST HUMAN
901	10812	20767	1.3	8.0E-39	AF000526.1	NT	Homo sapiens X-linked arachnodactyl dysplasia protein gene (EDDA), exon 2 and flanking repeat regions
2867	12884	22882	6.13	5.0E-39	AI750154.1	EST HUMAN	3d304.1x1 Bifurcated color HPLC7 Homo sapiens cDNA clone IMAGE:2274093 3' similar to TR-Q15408
9556	19154	10479	1.54	5.0E-39	AI750154.1	EST HUMAN	C15408.1x1 NEUTRAL PROTEASE LARGE SUBUNIT contains LTR711 LTR / repetitive element;
638	10479	20291	10.63	4.0E-39	AB015610.1	NT	Homo sapiens hypothetical protein FLJ10033 (FLJ10033) mRNA
3525	13441	22238	0.96	4.0E-39	AL1652210.2	NT	Chlorocruoridase mRNA for chlorocruoridase protein SAK, complete cds
6707	16887	26775	1.49	4.0E-39	AB052364.1	EST HUMAN	Homo sapiens zinc finger protein ZNF100 mRNA
9575	19164	19164	3.08	4.0E-39	11416177	NT	CFBF1 ORF repetitive element;
9887	10240	10240	2.03	4.0E-39	BE831642.1	EST HUMAN	Homo sapiens Ran GTPase activating protein 1 (RANGAP1) mRNA
41	10248	19890	11.27	3.0E-39	AG09164.1	EST HUMAN	QY07FN0003-2600000-278-005 FN1003 Human cDNA clone CR12-1
41	10029	19891	11.27	3.0E-39	AG09164.1	EST HUMAN	frat16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
41	10129	19832		11.27	3.0E-59	AA631949.1	EST_HUMAN
9104	18871	28781		5.51	3.0E-39	AI094557.1	EST_HUMAN
9104	18871	28782		5.51	3.0E-36	AI094557.1	EST_HUMAN
9147	18900			4.42	3.0E-39	AI094557.1	EST_HUMAN
879	10865			4.03	2.0E-39	BE402003.1	EST_HUMAN
884	10820			17.44	2.0E-35	AI25110.1	EST_HUMAN
1015	10833			3.61	2.0E-39	AI094557.1	EST_HUMAN
1513	11418			10.15	2.0E-39	AV372351.1	EST_HUMAN
1800	11925	21707		10.03	2.0E-39	AA729574.1	EST_HUMAN
2587	12458	22349		1.75	2.0E-39	AL162346.2	NT
4903	14201	23985		1.36	2.0E-39	BP370207.1	EST_HUMAN
6330	16223	26384		3.4	2.0E-39	AA508890.1	EST_HUMAN
8751	18891	28874		2.17	2.0E-39	AA508897.1	EST_HUMAN
6922	19594			2.31	2.0E-39	DB0841.1	NT
1487	11401	21282		1.78	1.0E-39	AA068345.1	NT
1514	11419	21275		4.95	1.0E-39	AA068345.1	NT
4561	14453	24240		5.49	1.0E-39	AV195198.1	EST_HUMAN
4604	14452	24279		8.58	1.0E-39	76557020	NT
5449	16579	28549		1.54	1.0E-39	TB0876.1	EST_HUMAN
5449	16579	28549		4.36	1.0E-39	AA278170.1	NT
5449	16579	28549		4.36	1.0E-39	AA278170.1	NT
6083	16228			1.66	1.0E-39	11436730	NT
6337	16220	23582		1.75	1.0E-39	D78132.1	Hom sapiens mRNA for rasierted GTP-binding protein, completo cds
543	10144	20294		1.67	1.0E-40	5803210	Hom sapiens UPR-induce phosphohydroxylase 2 (UGP2), mRNA
1215	11123	20971		10.19	9.0E-40	475545	Hom sapiens AE-binding protein 1 (AEBP1), mRNA
1215	11123	20972		10.19	9.0E-40	475545	Hom sapiens AE-binding protein 1 (AEBP1), mRNA

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 Table 4
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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1453	11338	21205	5.04	9.0E-40	AB033070.1	NT	Homo sapiens tissue inhibitor of metalloproteinase 3 (Sirtuin/dystrophy, pseudodiflammatory) (TIMP3) mRNA
3852	15069	23585	3.58	9.0E-40	AB033070.1	NT	Homo sapiens KIAA2430 protein, partial cds
4260	14446	23922	0.82	6.0E-40	467978/8	NT	Homo sapiens ubiquitin specific protease 33 (exopeptidase T-3) (USP33) mRNA
4388	14149	23923	1.12	9.0E-40	450798/8	NT	Homo sapiens ubiquitin specific protease 33 (exopeptidase T-3) (USP33) mRNA
3004	71932	22725	0.96	8.0E-40	AA078145.1	EST_HUMAN	Homo sapiens cDNA clone IMAGE:3619165
3847	13759	24070	2.41	8.0E-40	BE365851.1	EST_HUMAN	601286958f1 NTR MGC_8 Homo sapiens cDNA clone IMAGE:3619165
6541	16399	26579	1.65	7.0E-40	MGCS25.1	NT	Human DNA polymerase gamma mRNA, nuclear gene encoding mitochondrial protein, complete cds
6541	16399	26579	1.56	7.0E-40	U63255.1	NT	Human DNA polymerase gamma mRNA, nuclear gene encoding mitochondrial protein, complete cds
8270	18150	26391	2.83	7.0E-40	AL165246.2	NT	Homo sapiens chionocome 21 segment HS21C046
2096	12660	22449	3.86	6.0E-40	AA031275.1	EST_HUMAN	EST70527 T-cell lymphoma Homo sapiens cDNA 5' end similar to annular zinc finger protein family
2096	12660	22450	3.88	6.0E-40	AA031275.1	EST_HUMAN	EST70527 T-cell lymphoma Homo sapiens cDNA 5' end similar to zinc finger protein family
6616	15631	20124	3.08	6.0E-40	BE507066.1	EST_HUMAN	NRP101-x1 NCI CGAP GLC Homo sapiens cDNA clone MAGE:3210460 3'
6141	15669	26155	3.08	6.0E-40	11435783/8	NT	Homo sapiens fatty acid desaturase 1 (FADS1) mRNA
6141	15669	26155	3.08	6.0E-40	11435783/8	NT	Homo sapiens fatty acid desaturase 1 (FADS1) mRNA
7731	17881	27804	6.82	6.0E-40	AV650328.1	EST_HUMAN	VAE65028 GLC Homo sapiens cDNA clone GLC/CGFG404 3'
2551	12433	22326	1.89	6.0E-40	AL165295.2	NT	Homo sapiens chionocome 21 segment HS21C045
1894	11731	21607	1.36	4.0E-40	AI860005.1	EST_HUMAN	NRP101-x1 NCI CGAP Pr-28 Homo sapiens cDNA clone IMAGE:2248873 3' similar to TR-073505 073505
2081	11851	23973	2.67	4.0E-40	AF005628.1	NT	POL PROTEIN-X-linked arylalkylamine N-acetyltransferase protein gene (ED4), exon 2 and flanking repeat regions
4251	14180	23973	7.85	4.0E-40	765221/7	NT	Homo sapiens KIAA0433 protein (KIAA0433) mRNA
6652	16542	20738	3.76	4.0E-40	AA124809/1	EST_HUMAN	PIM-BN0162/0750-002Ab/1 BN0162/Homo sapiens cDNA clone IMAGE:1222122
7237	17114	23798	4.87	4.0E-40	BE000416.1	EST_HUMAN	PIM-BN0162/0750-002Ab/1 BN0162/Homo sapiens cDNA clone IMAGE:1222122
8099	17114	27306	4.87	4.0E-40	BE000416.1	EST_HUMAN	PIM-CN00176/0750-002Ab/1 BN0162/Homo sapiens cDNA clone IMAGE:1222122
4040	13943	23721	0.98	3.0E-40	AI861985/1	EST_HUMAN	WH12007-x1 NCI CGAP Kit11 Homo sapiens cDNA clone IMAGE:2386549 3'
6001	15006	26830	6.25	3.0E-40	1141732/2	NT	Homo sapiens sensin domain, seven transmembrane repeats (type I and type II-like), transmembrane domain (TM) and short cytoplasmic domain, (germiphorm) 5A (SEMA5A), mRNA

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Table 4

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Probe SEQ ID No.	Exon CRF SEQ ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
0882	19761	26956	4.28	3.0E-40	A 0708778.1	Homo sapiens HEV-associated factor (Y44E4) mRNA Ratlike norvegicus putative four repeat ton channel mRNA, complete cds
7186	17063	27253	1.49	3.0E-40	A 0708778.1	NT
7312	17188	27359	1.52	3.0E-40	A 0708778.1	Rattus norvegicus putative four repeat ton channel mRNA, complete cds
8397	18264	26515	1.93	3.0E-40	BE 390127.1	Homolog X1 NC1 CGCA_2 Xch13 Homo sapiens cDNA clone IMAGE:3148256 3 similar to canine MER29.53
8558	18196	28725	11.23	3.0E-40	6008873	NT
8825	18607	28954	1.93	3.0E-40	AV 1118279.1	ratB60.2x1 Scores: INF_T_GSC_S1 Homo sapiens cDNA clone IMAGE:2605491 3 similar to TR-Q19804
322	10283	12.69	2.0E-40	A 220305.1	C 15004 SIMILAR TO ENV OF TYPE A AND TYPE B RETROVIRUSES AND TO CAA&S II HERV S.	
7777	10707				G 52508.1X Scores: best! NIH_Homo sapiens cDNA clone IMAGE:1838847 3	
1783	11681				F 97461_40S RIBOSOMAL PROTEIN S5.	
1862	11787	21654	2.19	2.0E-40	AV 731601.1	AV 731601.1T1 Homo sapiens cDNA clone CTFAZ05 5'
1862	11787	21655	2.19	2.0E-40	4505168	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7) mRNA, and translated products
2026	11817	21807	1.08	2.0E-40	A 098562.1	W Rbar1_X1 NC1 CGAP GC6 Homo sapiens cDNA clone IMAGE:2514716 3 similar to TR-Q1982 Q8z1829
2123	12011	21910	2.61	2.0E-40	5455922	ZINC FINGER PROTEIN :
2333	12214	22112	2.35	2.0E-40	A 2277852.1	Homo sapiens adenylyl cyclase-associated protein 2 (CAP2) mRNA
2686	12825		1.08	2.0E-40	B 275632.1	Homo sapiens profilin TN genes for thin
3087	13014	22806	3.59	2.0E-40	5455922	H 01121567_F1_NIH_MGC_20 Homo sapiens cDNA clone IMAGE:33457784 5'
4807	14861	24478	1.49	2.0E-40	A 165280.2	Homo sapiens chromosome 21 segment HS2C-CB0
4807	14891	24479	1.49	2.0E-40	A 165280.2	Homo sapiens chromosome 21 segment HS2C-CB0
9865	10791		1.86	1.0E-40	A 2275899.1	I cmc_010.51 NC1 CGCA_P1 Homo sapiens cDNA clone IMAGE:10077008
2580	12451	22343	1.91	1.0E-40	B 036881.1	G 011600375_F1_NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3865393 5'
2863	12520		1.92	1.0E-40	BE 018348.1	b 278a.10.v1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048570 5' similar to TR-Q8z158_Q8z158
2707	12570	24480	0.92	1.0E-40	B F54 100.1	S NTX2A_N17 ..
2707	12570	22481	0.92	1.0E-40	B F54 100.1	S NCB_58 Homo sapiens cDNA clone IMAGE:51087738 5'
3288	13161		1.81	1.0E-40	4507142	I cmc_010.51 NC1 CGCA_P1 Homo sapiens cDNA clone IMAGE:41087738 5'
4505	14598	24184	6.28	1.0E-40	4506012	I cmc_010.51 NC1 CGCA_P1 Homo sapiens zinc finger protein 200 (ZNF200) mRNA, and translated products
4862	14772	24550	0.98	1.0E-40	7709778	I cmc_010.51 NC1 CGCA_P1 Homo sapiens ZGB5 protein (LOC51103) mRNA

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal Value	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6215 16081 28230	2.03	1.0E-40	AATG73201.1	EST_HUMAN	I42404.1 NCI_CGAAP_AAT_Homo_sapiens_cDNA_clone IMAGE:905167 3'		
6215 16081 28231	2.03	1.0E-40	AATG73201.1	EST_HUMAN	I42404.1 NCI_CGAAP_AAT_Homo_sapiens_cDNA_clone IMAGE:905167 3'		
8286 16168 28412	5.72	0.1E-40	AU1463245.1	EST_HUMAN	I42404.1 NCI_CGAAP_AAT_Homo_sapiens_cDNA_clone IMAGE:905167 3'		
8335 16232 28460	53.3	0.1E-40	AU236722.1	EST_HUMAN	I42404.1 NCI_CGAAP_AAT_Homo_sapiens_cDNA_clone IMAGE:905167 3'		
9921 19022 28622	3.93	1.0E-40	BF-334112.1	EST_HUMAN	I42404.1 NCI_CGAAP_AAT_Homo_sapiens_cDNA_clone IMAGE:905167 3'		
6921 16001 28689	1.73	8.0E-41	AL166203.2	NT	Homo_sapiens_chromosome_21_segment_IS22_Homo_sapiens_cDNA		
611 12378 20585	2.39	7.0E-41	A034354.1	EST_HUMAN	Wnp0404_x1_NCI_CGAAP_K11_Homo_sapiens_cDNA_clone IMAGE:24638935 3'		
841 12678 20598	2.35	7.0E-41	A034364.1	EST_HUMAN	Wnp0404_x1_NCI_CGAAP_K11_Homo_sapiens_cDNA_clone IMAGE:24638935 3'		
9557 15567 28693	3.27	7.0E-41	A034365.1	EST_HUMAN	Wnp0404_x1_NCI_CGAAP_K11_Homo_sapiens_cDNA_clone IMAGE:24638935 3'		
9391 19818 28694	4.82	7.0E-41	A1147229.1	NT	Homo_sapiens_pseudooxidase_and_mitochondrial_reactive_domain_22_(ADAM22)_mRNA		
278 10244 28694	1.72	6.0E-41	AB037163.1	NT	Homo_sapiens_pseudooxidase_and_mitochondrial_reactive_domain_22_(ADAM22)_mRNA		
2064 11954 218851	2.19	6.0E-41	7057042.1	NT	Homo_sapiens_Down_syndrome_candidate_region_1_(DSRC1)_mRNA		
4394 14860 24044	0.94	0.0E+01	BE597916.1	EST_HUMAN	60134048551_NHL_MSC_55_Homo_sapiens_cDNA_clone IMAGE:785267 5'		
1791 11860 21652	1.31	5.0E-41	6126268.1	EST_HUMAN	Icode10.51_Stratagene_lung_(#537210)_Homo_sapiens_cDNA_clone IMAGE:785267 5'		
4018 13822 20526	0.98	5.0E-41	6126268.1	EST_HUMAN	Homo_sapiens_targeted_myo_5_(chicken)_homolog_(TOMT)_mRNA		
6945 15550 20532	2.55	6.0E-41	BB07042.1	EST_HUMAN	Fimo-BB0741-25169-002-F11_BT0341_Homo_sapiens_cDNA		
1082 10968 20539	1.91	4.0E-41	BB-156318.1	EST_HUMAN	QV0H-T0387-50200-114-509_HTC0387_Homo_sapiens_cDNA		
1358 11293 21149	9.42	4.0E-41	AU163444.1	EST_HUMAN	AU163444_Homo_sapiens_cDNA_clone HEINBA:200555 5'		
1398 11983 21150	9.42	4.0E-41	AU027117.1	EST_HUMAN	owf506_s1_Saress_praefathyroid_tumor_NHHPA_Homo_sapiens_cDNA_clone IMAGE:640794 3' similar to TR-C00597_O00597_CYTOTCHROME_C-LIKE_POLYPEPTIDE		
1404 11309 21170	2.12	4.0E-41	A0506881.1	NT	owf506_s1_Saress_praefathyroid_tumor_NHHPA_Homo_sapiens_cDNA_clone IMAGE:640794 3' similar to TR-C00597_O00597_CYTOTCHROME_C-LIKE_POLYPEPTIDE		
1618 11652 21380	8.5	4.0E-41	A0506881.1	EST_HUMAN	owf506_s1_Saress_praefathyroid_tumor_NHHPA_Homo_sapiens_cDNA_clone IMAGE:640794 3' similar to TR-C00597_O00597_CYTOTCHROME_C-LIKE_POLYPEPTIDE		
2859 12887 22578	3.03	4.0E-41	AJ220041.1	NT	owf506_s1_Saress_praefathyroid_tumor_NHHPA_Homo_sapiens_cDNA_clone IMAGE:640794 3' similar to TR-C00597_O00597_CYTOTCHROME_C-LIKE_POLYPEPTIDE		
2859 12787 22579	3.03	4.0E-41	AJ220041.1	NT	owf506_s1_Saress_praefathyroid_tumor_NHHPA_Homo_sapiens_cDNA_clone IMAGE:640794 3' similar to TR-C00597_O00597_CYTOTCHROME_C-LIKE_POLYPEPTIDE		
4052 13954 23730	1.89	4.0E-41	X028954.1	NT	H_sapiens_DNAse_I_enriched_site_(HS-3)_enhancer_element		
5520 15825 23730	1.39	4.0E-41	AV7552925.1	EST_HUMAN	AV7552925_NHL_MSC_17_Homo_sapiens_cDNA_clone IMAGE:502150 5'		
7569 17441 27657	6.01	4.0E-41	HE0304683.1	EST_HUMAN	6018880061-NHL_MSC_17_Homo_sapiens_cDNA_clone IMAGE:412219 5'		
8925 18733 27657	7.52	4.0E-41	AV710460.1	EST_HUMAN	AV710460_Ct-Homo_sapiens_cDNA_clone OuAACCC075'		
9690 19510	2.31	4.0E-41	AV706431.1	EST_HUMAN	AV706431_AbC_Homo_sapiens_cDNA_clone ADCARE02 5'		

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Table 4

Single Exon Proteins Expressed in Heart

Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
602	10857	20704	1.64	3.0E-41	AB00176.1	NT	Human epsilon PADH19 mRNA for Peptidylarginine deiminase type II, complete cds (complete cds)
4240	14136	23914	3.08	3.0E-41	AB038686.1	NT	Human epsilon mRNA for KIAA1327 protein, partial cds
6037	14619	14619	0.85	3.0E-41	AB037748.1	NT	Human epsilon mRNA for putative p64 CLCP protein
6376	16590	25143	7.36	3.0E-41	KB7699.1	NT	Human epsilon mRNA for KIAA1387 protein, partial cds
8849	15783	25873	1.49	3.0E-41	KB7805.1	NT	Human ribosomal protein L23a mRNA, complete cds
1782	11445	21305	7.3	2.0E-41	LA3701.1	NT	Human ribosomal protein L23a mRNA, complete cds
1976	11810	21688	2.3	2.0E-41	LA391940.1	EST_HUMAN	EST Human ribosomal protein L23a mRNA, 5' end
2172	12050	21052	1.03	2.0E-41	AB040257.1	NT	Human mRNA for KIAA0257 gene, complete cds
2221	12106	22010	4.07	2.0E-41	KB8931.1	NT	G gorilla DNA for ZFP80 gene homolog
2798	11445	21305	5.31	2.0E-41	LA3701.1	NT	Human ribosomal protein L23a mRNA, complete cds
4521	14414	24100	1.06	2.0E-41	AL1652687.2	NT	Human sex chromosomes chromosome 21 segment 1 HS21C087
4521	14414	24200	1.06	2.0E-41	AL1652687.2	NT	Human sex chromosomes chromosome 21 segment 1 HS21C087
6952	16891	28595	6.59	2.0E-41	AB038404.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
6702	16882	28772	1.33	2.0E-41	M6944.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
6702	16952	28773	1.33	2.0E-41	M69844.1	NT	Human epsilon mRNA for KIAA1327 protein, partial cds
6716	16906	24786	1.39	2.0E-41	AA328265.1	EST_HUMAN	EST 73/723 Embryo, 12 weeks, 1 Human epsilon mRNA, 5' end
7188	17005	27255	1.7	2.0E-41	BR2722	SWISSPROT	ZINC FINGER PROTEIN 135
8777	18594	28592	3.46	1.0E-41	AA372637.1	EST_HUMAN	AA372637.1
4465	14559	24149	4.64	1.0E-41	6674698.1	NT	Mus musculus tubulin alpha (Tubaa) mRNA
7420	17287	27404	1.8	1.0E-41	AI217888.1	EST_HUMAN	qf77c10x1 Scares. Real. NHE Homozygous cDNA clone IMAGE:17568868 3'
9167	18930	26320	2.63	1.0E-41	AI217888.1	EST_HUMAN	Homologous identical protein FLJ2054 (FLJ2054), mRNA
9898	16586	21060	1.33	6.0E-12	BE779161.1	EST_HUMAN	FLCOH1 (T0613-210600-052-901) H70850 Human antigen-DNA
7262	17168	27387	2.63	6.0E-12	11560151	NT	Human epsilon hypothetical C2/Z finger protein FLJ22504 (FLJ22504), mRNA
445	10369	26216	5.37	6.0E-12	AF005930.1	NT	Human epsilon hypothetical protein COX4 (COX4), gene, complete cds and flanking repeat regions
2092	11652	21848	1.32	6.0E-12	AB028686.1	NT	Human epsilon mRNA for KIAA1327 protein, partial cds
9258	19825	3246	8.0E-12	AA463896.1	EST_HUMAN	NT	
916	10840	1833	8.0E-12	AL165285.2	NT	36762.51 NC1 COX4 -Thi Coenzyme A expressed sequence TAG mRNA.	
1812	11709	21586	3.25	6.0E-12	AB012872.1	NT	Human epsilon chromosome 21 segment 1 human 4-knase 230 (FLJ22504) mRNA, complete cds
1812	11709	21587	3.25	6.0E-12	AF012872.1	NT	Human epsilon phosphatidylinositol 4-knase 230 (FLJ22504) mRNA, complete cds

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Table 4

Single Exon Probes Expressed In Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID NC:	Expression Signal	Most Similar BLAST E Value	Top Hit Assessment No.	Top Hit Database Source	Top Hit Descriptor	
xp29108.x1 NC_004939 CCAP_B1 Homo sapiens cDNA clone IMAGE:2741769 3' similar to contains L1,t1,L1 repetitive element:								
2244	12:28	3.51	6.0E-42	AVN2281565.1	EST_HUMAN	Q24H00_X1 NC_004939 CCAP_B1 Homo sapiens cDNA clone IMAGE:1985761 similar to contains L1,t1,L1 repetitive element:		
4626	14814	1.04	6.0E-42	A1B2A7B9B0.1	EST_HUMAN	Homo sapiens mRNA for KIAA1067 protein, partial cds		
5335	16276	25.05	1.81	6.0E-42	AB2028960.1	Homo sapiens mRNA for KIAA1067 protein, partial cds		
5504	15275	25.05	1.72	6.0E-42	AB2028960.1	Homo sapiens 26 pseudoadenomatous region, segment 1/2		
151	10:06	5.44	6.0E-42	AJ271735.1	EST_HUMAN	Homo sapiens 26 pseudoadenomatous region, segment 1/2		
431	10376	20.67	1.17	6.0E-42	BB271735.1	Hs671ef1-X1 NC_004939 CCAP_Luc4 Homo sapiens cDNA clone IMAGE:2175952 3'		
478	10422	2.94	6.0E-42	5730598.NT	Homo sapiens SET domain and histone H3/H4 triphosphate 1 fusion gene (SET1/MAR) mRNA			
479	10:23	1.27	5.0E-42	5730598.NT	Homo sapiens SET domain and histone H3/H4 triphosphate 1 fusion gene (SET1/MAR) mRNA			
6016	15920	20950	1.76	5.0E-42	11438053.NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA		
6016	15920	20051	1.76	5.0E-42	11438053.NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA		
6072	16055	29203	2.76	6.0E-42	11417927.NT	Homo sapiens myobutulin related protein 3 (MTRR3) mRNA		
6274	16138	28294	1.67	5.0E-42	AE071589.1	Homo sapiens multifunctional calcium/calmodulin-dependent protein kinase II delta2 isoform mRNA, complete cds		
7078	16976	27168	2.76	5.0E-42	AB057715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds	
8346	18243	28164	2.16	5.0E-42	AF056066.1	NT	Homo sapiens hypothetical protein FLJ20265 (FLJ20265) mRNA	
736	10658	20502	8.89	4.0E-42	AF056066.1	NT	Homo sapiens MR class 1 region	
756	10668	20503	8.89	4.0E-42	AF056066.1	NT	Homo sapiens MR class 1 region	
1050	10677	20950	2.07	4.0E-42	AF169011.1	NT	Homo sapiens ribonuclease III (RNase) mRNA, complete cds	
4100	14000	23179	1.51	4.0E-42	AK594711.1	NT	Homo sapiens PRDS-27 mRNA	
4156	11056	23830	4.52	4.0E-42	45056466.NT	Homo sapiens regulatory factor X, 4 (influences HLA class II expression) (RFPA4) mRNA		
4480	14374	24162	10.26	4.0E-42	45058008.NT	Homo sapiens zinc finger protein 17 (ZNF177) mRNA		
8041	17832	28179	2.07	4.0E-42	AVN186830.1	EST_HUMAN	RC1-ST0278-040400-0184-111 S1/0278 Homo sapiens cDNA	
8041	17832	28180	2.07	4.0E-42	AVN186830.1	EST_HUMAN	RC1-ST0278-040400-0184-111 S1/0278 Homo sapiens cDNA	
8714	18531	28515	3.22	4.0E-42	BF05527.1	EST_HUMAN	RG1-468531F1 NIH-NSC-86 Homo sapiens cDNA clone IMAGE:910510 5' similar to contains	
08	10084	0.78	3.0E-42	AA4486105.1	EST_HUMAN	tgf-β1 Strategic element library (R5972/20) Homo sapiens cDNA clone IMAGE:910510 5' similar to contains		
1467	11372	21230	3.63	3.0E-42	BR2316834.1	EST_HUMAN	THR-12 THR repetitive element	
2361	12241	3.69	2.0E-42	AVN089544.1	EST_HUMAN	RC3-NN0072-070400-0110 NNN070 Homo sapiens cDNA		
2376	12253	22146	2.15	2.0E-42	AW55059.1	EST_HUMAN	3616200-3'prime NIH-MGC-7 Homo sapiens cDNA clone IMAGE:21919263 3'	
5619	15437	26500	10.2	2.0E-42	AVW65398.1	EST_367453 IMAGE repeatmasker, MACC Homo sapiens cDNA		

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Table 4
Single Exon Probes Express

Probe	Exon	ORF SEQ	Most Similar	Top Hit	Top Hit Descriptor		
	SEQ ID NO:	ID NO:	Expression Signal	BLAST E Value	No.	Accession No.	Database Source
5518	15437	29561	10.2	2.0E-42	AW055565.1	EST_HUMAN	EST367438 IMAGE sequences, MAGE Homeo boxers cDNA
7663	17513	27739	1.27	5.6E-05	BE5919.1	EST_HUMAN	EST010672347 NIH_3T3 clone IMAGE347820 5'
717	10484	20478	1.06	1.0E-42	X57471.4	NT	Human endogenous retrovirus p11 (ERV6)
1026	10944	20786	0.96	1.0E-42	AV295609.1	EST_HUMAN	U-HB-13;SAP-04-L11 NC1 CGAP_Sau3a clone IMAGE272871 3'
1085	11011	20842	1.11	1.0E-42	AJ251818.1	NT	Home sapiens partial CpG gene for complement component C8, exon 1
1085	11011	20843	1.11	1.0E-42	AJ251818.1	NT	Home sapiens partial CpG gene for complement component C8, exon 1
1222	12688	20963	12.78	1.0E-42	AF007106.1	NT	Home sapiens NAUDI-lubricin precursor homolog mRNA, nuclear gene encoding microtubulin protein, complete cds
1222	12688	20984	12.78	1.0E-42	AF067106.1	NT	Home sapiens NAUDI-lubricin precursor homolog-like (Orc25L) mRNA, nuclear gene encoding microtubulin protein, complete cds
1873	11575	21443	1.46	1.0E-42	AF112229	NT	Home sapiens re (LOC5201), mRNA
1886	11879	21772	0.91	1.0E-42	AF112026.1	NT	Home sapiens major histocompatibility complex, class II, DRA alpha (H-A-DNA) mRNA
2497	12372	22284	1.68	1.0E-42	AF054489	NT	Home sapiens origin recognition complex, subunit 6 (yeast homolog)-like (Orc25L) mRNA, and translated products
2835	12862	22962	8.93	1.0E-42	AF054524	NT	Home sapiens KIAA0255 gene product (KIAA0255) mRNA
3547	15561	23347	2.15	1.0E-42	AF052037	NT	Home sapiens chromosome 21 segment HS21C007
3840	13760	23553	1.02	1.0E-42	AL65280.2	NT	Home sapiens chromosome 21 segment HS21C080
4165	14053	23827	1.72	1.0E-42	AL65280.2	EST_HUMAN	RC301017_16100280 S101971Home sapiens cDNA
4489	14383	24170	0.86	1.0E-42	AW163617.1	NT	Home sapiens protease inhibitor (PI31), mRNA
4640	14528	24316	2.85	1.0E-42	MA003122	NT	Home sapiens proteasome inhibitor (PI31), mRNA
4640	14528	24317	2.85	1.0E-42	MA003122	NT	Home sapiens proteasome inhibitor (PI31), mRNA
4865	14565	24348	6.35	1.0E-42	MG067538	NT	Home sapiens ryanodine receptor (RyR3) mRNA
4769	14654	24442	1.2	1.0E-42	AB035114.1	EST_HUMAN	Home sapiens mRNA for KIAA1288 protein, partial cds
5048	14920	24693	0.98	1.0E-42	AF051612	NT	Home sapiens disintegrin and metalloprotease domain 23 (ADAM23) mRNA
5048	14920	24694	0.98	1.0E-42	AF051612	NT	Home sapiens disintegrin and metalloprotease domain 23 (ADAM23) mRNA
7805	17655	27263	3.86	9.0E-43	AF051739	NT	Home sapiens chromodomain, Y chromosome-like (CDY1) mRNA
8397	20525	28025	9.0E-43	AF051739	NT	Home sapiens Y chromosome-like (CDY1) mRNA	
626	10573	20396	12.13	8.0E-43	AV736524.1	EST_HUMAN	AV736524 CB Home sapiens cDNA clone CB-LAK108 5'
C36	10573	20387	12.13	8.0E-43	AV736524.1	EST_HUMAN	AV736524 CB Home sapiens cDNA clone CB-LAK108 5'
985	10018	20441	4.33	8.0E-43	B622276	NT	Home sapiens hypothetical protein FL20297 (FL20297), mRNA
685	10018	20442	4.33	8.0E-43	B622276	NT	Home sapiens hypothetical protein FL20297 (FL20297), mRNA
685	20443	20443	4.33	8.0E-43	B622276	NT	Home sapiens hypothetical protein FL20297 (FL20297), mRNA
3369	15053	23262	6.05	7.0E-43	AV264642.1	EST_HUMAN	2822251 Sarmine NIH_3T3 Home sapiens cDNA clone IMAGE222251 5'

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Table 4

Single Exon Probes Expressed in Heart

Probe	Exon	ORF SEQ ID NO:	NCI	Top Hit Descriptor		
				Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source
7092	16969			1.76	7.0E-43	Aln97978_1
1320	11227			10.17	6.0E-43	AA491880_1
2347	12421			4.15	6.0E-43	AV7052391_1
5811	15716			2.02	6.0E-43	9855973_N
6128	15975			2.02	6.0E-43	AV498877_1
7668	17618			1.83	6.0E-43	AA198184_1
8449	18322			6.54	6.0E-43	AL119184_1
1371	10111			1.98	5.0E-43	AL512123_2
494	10407			3.01	5.0E-43	AA585785_1
2816	12745			1.35	5.0E-43	AV732575_1
7900	17308			2.7514	4.47	EST_HUMAN
7845	17766			2.8035	2.2	6.0E-43
7064	17814			20055	1.41	EST_HUMAN
8145	18033			22290	5.48	EST_HUMAN
8538	18212			28448	2.67	EST_HUMAN
8755	17622			28448	2.6	5.0E-43
957	12043			20728	4.85	4.0E-43
6231	16597			16596	1.72	4.0E-43
6757	16596			26824	4.49	4.0E-43
6757	16898			25925	4.49	4.0E-43
8624	18498			28761	1.8	4.0E-43
9174	18915				1.89	4.0E-43
1196	11105				2.84	3.0E-43
						NT

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Single Exon Probes Express in Heart

Probe No.	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
							NT	Hsapiens gene encoding a mitochondrial protein [transcribed transcription] Human; leukemic cell line SKM1; mRNA
1569	11571	21497	1.46	3.0E-43	X07859.1	NT	NT	AML-EV1-pAANL-L241 fusion protein [transcribed transcription] Human; leukemic cell line SKM1; mRNA
3524	13440	23237	1.05	3.0E-43	S58002.1	NT	NT	Mitami; 8505 nt
4513	14059	238972	0.96	3.0E-43	AA548164.1	EST; HUMAN	nt5650..61 et al NCBI CGAP	Homo sapiens cDNA clone IMAGE:1017419
5537	15743	258955	1.71	3.0E-43	7205300.2	NT	Murine muscle cholinesterase	Murine muscle cholinesterase cDNA clone (Oncogene) mRNA
5537	15743	268955	1.71	3.0E-43	7205300	NT	Murine muscle cholinesterase	Murine muscle cholinesterase binding transcription factor (UBTF) gene partial cds
6537	15640	25072	3.78	3.0E-43	U65457.1	NT	NT	Human fibrosarcoma cell line RFA-6721 human satellitome cDNA clone IMAGE:535413 3' similar to contains
6746	16697	27188	6.68	3.0E-43	AA458824.1	EST; HUMAN	THRE12 TIR repetitive element;	aa8811.1 st Strategene fetal retina 657 19165; mRNA
7120	18759	260681	1.18	3.0E-43	78651721	NT	Human sapiens hypothetical protein (RA60116); mRNA	Human sapiens SET domain and methyltransferase fusion gene (SET/MAR) mRNA
8862	18759	26332	2.02	3.0E-43	5730058	NT	NT	Orf00110121 Selenocysteine, testis, NHT Human selenocysteine cDNA clone IMAGE:1735988 3' similar to contains
117	10146		4.27	2.0E-43	AI097874.1	EST; HUMAN	PTR7 PTR7 repetitive element;	PTT7 PTR7 repetitive element;
6512	16716	26332	7.53	2.0E-43	AV027590.1	EST; HUMAN	FBX-B1 FBX-B1 protein; mRNA	Human fibrosarcoma cell line RFA-6721 human satellitome cDNA clone IMAGE:2721717 3'
6535	16716	26332	7.53	2.0E-43	LA3701.1	NT	Human fibrosarcoma cell line RFA-6721 human satellitome cDNA clone IMAGE:2721717 3'	Human fibrosarcoma cell line RFA-6721 similar to LINE-1
8532	18404		3.93	2.0E-43	78651720	EST; HUMAN	FBX-B1 FBX-B1 protein; mRNA	FBX-B1 FBX-B1 protein; mRNA
1490	11534	21304	2.92	1.0E-43	A1548366.1	NT	Human sapiens Ras-Activating GTP-binding protein (RAS22TA) genes, exons 1b and 2	Human sapiens Ras-Activating GTP-binding protein (RAS22TA) genes, exons 1b and 2
1678	121450	213965	2.92	1.0E-43	AA548366.1	NT	Human sapiens Ras-Activating GTP-binding protein (RAS22TA) genes, exons 1b and 2	Human sapiens Ras-Activating GTP-binding protein (RAS22TA) genes, exons 1b and 2
2682	126567	22444	3.36	1.0E-43	AL622924.1	NT	NT	NT
5687	16822	260114	4.96	1.0E-43	BF442823.1	EST; HUMAN	600213151 F151 CGAP	Brn01 Homeo sapiens cDNA clone IMAGE:4157666 5'
5687	16822	260115	12.07	1.0E-43	BF451168	NT	Human sapiens Sp4 transcription factor (SP4) mRNA	Human sapiens Sp4 transcription factor (SP4) mRNA
5687	16822	260115	12.07	1.0E-43	BF451168	NT	Human sapiens Sp4 transcription factor (SP4) mRNA	Human sapiens Sp4 transcription factor (SP4) mRNA
6159	1517	24860	1.93	1.0E-43	RH761.1	EST; HUMAN	Y000111 Seven transmembrane 1N1R Homo sapiens cDNA clone MAGE:347325 5' similar to SPB200 MOUSE Prostate B104N PROTEIN DV38	Y000111 Seven transmembrane 1N1R Homo sapiens cDNA clone MAGE:347325 5' similar to SPB200 MOUSE Prostate B104N PROTEIN DV38
6700	16580	27190	1.63	1.0E-43	AF198490.1	NT	Human sapiens 61622..1 region and MG58 (CfEF2/11) genes, partial cds	Human sapiens 61622..1 region and MG58 (CfEF2/11) genes, partial cds
7129	17006	27199	25.23	1.0E-43	AB480367.1	EST; HUMAN	NT	NT
8331	12028	284598	8.75	1.0E-43	AB480367.1	EST; HUMAN	NT	NT
8672	16580	28544	3.2	1.0E-43	11242378	NT	Human sapiens calcium channel, voltage-dependent, alpha 1c subunit (CACNA1C) mRNA	Human sapiens calcium channel, voltage-dependent, alpha 1c subunit (CACNA1C) mRNA
9405	19069	28511	9.66	1.0E-43	AI176341	EST; HUMAN	DK027610151.17 tRNA (ham-2) Human selenocysteine cDNA clone IMAGE:2133776 3'	DK027610151.17 tRNA (ham-2) Human selenocysteine cDNA clone IMAGE:2133776 3'
9812	16198	28525	1.68	1.0E-43	AN79416.1	EST; HUMAN	NT	NT
9812	16198	20848	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20849	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20850	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20851	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20852	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20853	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20854	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20855	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20856	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20857	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20858	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20859	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20860	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20861	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20862	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20863	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20864	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20865	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20866	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20867	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20868	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20869	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20870	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20871	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20872	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20873	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20874	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20875	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20876	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20877	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20878	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20879	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20880	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20881	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20882	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20883	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20884	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20885	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20886	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20887	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20888	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20889	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20890	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20891	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20892	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20893	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20894	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20895	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20896	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20897	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20898	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20899	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20900	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20901	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20902	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20903	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20904	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20905	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20906	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20907	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20908	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20909	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20910	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20911	5.68	8.0E-44	AI222985.1	EST; HUMAN	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419	ND260404-X1 Homo sapiens cDNA clone IMAGE:1017419
9812	16198	20912	5.					

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Table 4
Single Exon Probes Express

Single Exon Probes Expressed in Heart

Probe	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal Value	Most Similar BLAST E Value	Top Hit HsAssession No.	Top Hit Database Source	Top Hit Descriptor
6504	18377	28643	3.39	8.0E-44	YH4638.2	NT	Homo sapiens mRNA for thymidine kinase, type II
6504	18743	29038	2.05	8.0E-44	11527380	NT	Homo sapiens polymerase RNA, II (DNA directed) polypeptide F (POLRPF), mRNA
6505	19031	29058	1.89	8.0E-44	11410905	NT	Homo sapiens protein kinase C, alpha binding protein (HR1/HF1/22), mRNA
9400	18369	25191	1.75	8.0E-44	11450599	NT	Homo sapiens polypeptide nucleic acid (PNA) clone IMAGE:134620_5'
9742	19532	29059	1.84	8.0E-44	11416006	NT	Homo sapiens polypeptide nucleic acid (PNA) clone IMAGE:134620_5'
9895	18369	25191	0.85	7.0E-44	R0305.1	EST_HUMAN	Homo sapiens LIM domain-containing preferred banding pattern in bone (LFBP1), mRNA
9443	12074	21978	1.2	7.0E-44	5031885	NT	Homo sapiens mRNA for histone H3 repeat region
2187	12074	21978	2.2	7.0E-44	AF087289.1	NT	Homo sapiens mRNA for histone H3 repeat region
2387	12884	22654	2.2	7.0E-44	AF087289.1	NT	Homo sapiens mRNA for histone H3 repeat region
2387	12884	23485	2.28	7.0E-44	AL165284.2	NT	Homo sapiens chromosome 21 unknown mRNA
3786	13698	28231	1.17	7.0E-44	AF231616.1	NT	Homo sapiens chromosome 21 unknown mRNA
4148	14046	28232	1.17	7.0E-44	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
4148	14046	28238	2.05	7.0E-44	AF068859.1	EST_HUMAN	EST:AF068859_Homo sapiens cDNA clone Y79444 (D90446) 5'
6506	18741	29090	2.61	8.0E-44	AV684061.1	EST_HUMAN	EST:AV684061_Human gene (partial) X73 gene and Z771 gene
300	10284	29086	2.52	5.0E-44	AK085860.1	NT	Homo sapiens cDNA AKA085860 gene (partial) X73 gene and Z771 gene
320	10288	29072	2.04	6.0E-44	AJ268860.1	NT	Homo sapiens cDNA Bm25_Homo sapiens cDNA clone MG:21700653_3' similar to contains ORF
6605	18485	29072	3.79	5.0E-44	AK08523.1	EST_HUMAN	EST:AK08523_Human gene (partial) X73 gene and Z771 gene
7959	17373	23086	2.56	6.0E-44	AU21571.1	EST_HUMAN	AU21571_Human gene (partial) X73 gene and Z771 gene
8564	18433	28072	13.3	4.0E-44	AK08578.1	NT	Homo sapiens carboxy terminal LIM domain protein (CLIM1) mRNA, complete cds
8564	18433	28073	1.07	3.0E-44	AK08579.1	EST_HUMAN	Homo sapiens carboxy terminal LIM domain protein (CLIM1) mRNA, complete cds
1146	11646	22924	1.54	3.0E-44	AK085839.1	EST_HUMAN	AK085839_Human sequestosome 1 clone IMAGE:3893839 5'
2485	12300	22777	5.08	3.0E-44	AA168951.1	EST_HUMAN	AA168951_Stratagene full length 90720C_Homo sapiens cDNA clone IMAGE:6097775'
3095	12586	10951	2.75	2.0E-44	AB209865	NT	Homo sapiens DEAD1/H (AP-1/Gli-Asp) 5' box polypeptide 1 (DDX1) mRNA
1033	10951	20794	2.75	2.0E-44	AB209865	NT	Homo sapiens DEAD1/H (AP-1/Gli-Asp) 5' box polypeptide 1 (DDX1) mRNA
1168	11098	20945	4.63	2.0E-44	BB030200	NT	Homo sapiens transmembrane trafficking protein (TMF21), mRNA
1168	11098	20946	4.65	2.0E-44	BB030200	NT	Homo sapiens transmembrane trafficking protein (TMF21), mRNA
1280	11197	21052	2.79	2.0E-44	AF135658.1	NT	Homo sapiens RAB36 (RAB36) mRNA, complete cds
1346	11262	21108	1.43	2.0E-44	BE469326.1	EST_HUMAN	BE469326_Human gene (partial) L124_Human apolipoprotein B-binding protein
2105	11944	21884	2.03	2.0E-44	BF067085.1	NT	BF067085_Human mRNA for integrin beta 1 subunit, complete cds
2239	12403	22524	1.1	2.0E-44	D2653.1	NT	D2653.1_Human mRNA for integrin beta 1 subunit, complete cds

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID NC:	Exon Seq ID NC:	ORF seq ID NC:	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
2567	12438		3.32	2.0E-44	501653 NT	Human septins adipo- ^r -related protein complex 4, Sigma 1 subunit (CLAPPS4), mRNA	
3425	13842	21147	1.95	2.0E-44	DB7075.1 NT	Human septins DNA for amyloid precursor protein, complete cds	
4466	14952	24162	1.76	2.0E-44	AV186478.1 NT	FMA-SN0016-20250-003-004 SIN016181 Homo sapiens cDNA	
6779	15817	25719	1.39	2.0E-44	11446901 NT	Human septins chemotactin (C-C motif) receptor 9 (CCR9), mRNA	
6007	16107	24870	1.46	2.0E-44	AF058668.1 NT	Human septins general transcription factor 24 (GTF24), mRNA, alternatively spliced product, complete cds	
6383	16245	28406	3.86	2.0E-44	114119256 NT	Human septins glutamate receptor, metabotropic 3 (GRM3), mRNA	
6383	16245	28407	3.98	2.0E-44	114119256 NT	Human septins glutamate receptor, metabotropic 3 (GRM3), mRNA	
7009	16886	27078	1.98	2.0E-44	BB3902.1 NT	301285914571 Human septins cDNA clone MAGE-73783 5'	
9022	16816		2.22	2.0E-44	BE244602.1 NT	TGA2P1 BE2705 5' Pediatric acute lymphoblastic leukemia Bayo-HSGC project TGBA Homo sapiens cDNA clone TGBA2P1705	
9710	19735	24910	2.72	2.0E-44	AB002374.1 NT	Human mRNA for KA40276 gene, partial cds	
9906	19835		1.38	2.0E-44	11523293 NT	Human septins case syringoma syndrome region candidate 1 (CEERS1), mRNA	
46	10034	19839	3.94	1.0E-44	7657534 NT	Human septins Nasheen/Nik-related kinase (NKK), mRNA	
48	10034	19840	3.64	1.0E-44	7657534 NT	Human septins Nasheen/Nik-related kinase (NKK), mRNA	
506	10050	20312	1.85	1.0E-44	CT0246-039300-0294-172 CT0246-039300-0294-172 Homo sapiens cDNA		
1179	11098		1.52	1.0E-44	AV18631.1 NT	RC1-BN0036-110306-012-001 BN0036-110306-012-001 Homo sapiens cDNA	
1185	11480		6.54	1.0E-44	AL165303.2 NT	Human septins chromosome 21 segment 1 (S21C1) C13	
2177	12064	21985	3.53	1.0E-44	AA424654.1 NT	Human septins cDNA clone IMAGE-73783 6' similar to contains THR-13 THR repetitive element; 2xVS302.17 Scares, total fetus, N2c2H8, 5'w Homo sapiens cDNA clone IMAGE-731983 3'	
2177	12064		3.53	1.0E-44	AA424654.1 NT	Human septins cDNA clone IMAGE-73783 6' similar to contains THR-13 THR repetitive element; 2xVS302.17 Scares, total fetus, N2c2H8, 5'w Homo sapiens cDNA clone IMAGE-731983 3'	
2231	12116	22024	1.05	1.0E-44	AA390699.1 NT	EB95g11.171 Scares, total fetus, N2c2H8, 5'w Homo sapiens cDNA clone IMAGE-73783 6'	
2752	12564	22489	1.39	1.0E-44	AF169778.1 NT	Human septins transcription factor ISCP-W enhancer 3, JMV 1 protein, JM1 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LM domain protein, 6, and synaptophysin genes, complete cds, and t-type calcium channel alpha	
3694	13576		5.08	1.0E-44	AV445669.1 NT	RC1-CT0246-039300-0294-172 CT0246-039300-0294-172 Homo sapiens cDNA	
5051	14891	24702	0.31	1.0E-44	AA190755.1 NT	Human septins alpha/beta satellite DNA, M1 promoter type	
5051	14891	24703	0.81	1.0E-44	AA190755.1 NT	Human septins alpha/beta satellite DNA, M1 promoter type	
6373	18255		10.75	1.0E-44	AV17440655.1 NT	AV17440655.1 Human septins cDNA clone DCB137EC03 6'	
8816	18629		28918	4.18	1.0E-44	10265841 NT	Human septins Sust domain (SUST) repeat containing (BK655Ad2), mRNA
8899	18891	23970	3.43	1.0E-44	AV186087.1 NT	RC1-CT0246-039300-0294-172 CT0246-039300-0294-172 Homo sapiens cDNA	
8899	18891	25971	3.43	1.0E-44	AV186087.1 NT	RC1-CT0246-039300-0294-172 CT0246-039300-0294-172 Homo sapiens cDNA	
4476	14370	24159	1.74	9.0E-45	8923951 NT	Human septins hypothetical protein F1-10379 (FL-10379), mRNA	

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID No.	Exon ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4476	14370	24160	1.74	9.0E-45	8229291	NT	Human sapiens hypothetical protein FLJ10376 (FLJ10376), mRNA
2477	12853	22246	3.9	6.0E-45	5174718	NT	Human sapiens TRK-related gene (NOTE: non-standard symbol and name) (TTC) mRNA
5015	14889	24666	7.49	8.0E-45	5174718	NT	Human sapiens TRK-related gene (NOTE: non-standard symbol and name) (TTC) mRNA
3866	13806	13806	5.25	6.0E-45	AVM167607.1	EST_HUMAN	Human sapiens fetal brain 000001 Homo sapiens cDNA clone IMAGE:37829309 3' similar to SW-R13A_HUMAN
9707	19716	14645	1.46	5.0E-45	11416213	NT	Human sapiens APC/retinol-binding protein factor GTPase activating protein 1 (ARGAP1), mRNA
874	18000	18000	1.11	5.0E-45	AL162035.2	NT	Human sapiens chromosome 21 segment 18S21C03
1987	11652	21739	6.01	5.0E-45	BF333627.1	EST_HUMAN	CM-CNN0044-1802035.15-01 Homo sapiens cDNA clone IMAGE:21104653 3' similar to SW-PAX1_MOUSE
3173	13068	22604	2.01	5.0E-45	AE023768.1	EST_HUMAN	leg4907_A1 NC1 CGAP_CU_1 Homo sapiens cDNA clone IMAGE:21104653 similar to SW-PAX1_MOUSE
5394	15003	25165	6.83	5.0E-45	AA367781.1	EST_HUMAN	21203.1_Scar re. 1.5e-05 NT Human sapiens cDNA clone IMAGE:2728773 similar to contains element
7228	17703	27292	1.67	6.0E-45	4759273	NT	TAK1 repetitive element;
8940	18748	20043	2.67	6.0E-45	82226968	NT	Human sapiens programmed cell death 6 (PDCD6), mRNA
1127	11041	20983	6.96	4.0E-45	X058261	NT	H. sapiens ARY1 gene
2286	12350	22207	1.96	2.0E-45	BE265622.1	EST_HUMAN	20194449P_7_Homo sapiens cDNA clone IMAGE:3359425 5'
9813	19192	13210	1.02	4.0E-45	BF0750077.1	EST_HUMAN	0202040259P_1 NIH_KCC_381 Homo sapiens cDNA clone IMAGE:2148265 5'
3967	13210	13210	1.17	7.0E-45	T71486.1	EST_HUMAN	yG3507_11_Sources fetal liver spleen
6920	16798	16798	1.51	3.0E-45	AV723976	HTB_Homo sapiens cDNA clone HTB140_GA5	
7164	16981	21713	3.44	3.0E-45	4758481	NT	Human sapiens podjus subunitarily n_2 (G0LGA2), mRNA
7907	17767	27986	8.37	3.0E-45	AL163227.2	NT	Human sapiens chromosome 21 segment 18S21C027
7907	17767	27987	8.37	3.0E-45	AL163227.2	NT	Human sapiens DNA for endogenous retinol-like element
9814	19660	12331	1.33	3.0E-45	X09211.1	NT	H. sapiens DNA for endogenous retinol-like element
2454	12331	21716	2.17	2.0E-45	AL163218.2	NT	Human sapiens chromosome 21 segment 18S21C018
2596	12224	22716	0.93	2.0E-45	AJ242313.1	NT	Human sapiens pallial 5-HTR receptor genes, exons 2 to 5
6920	15834	28957	4.82	2.0E-45	LO1685.1	NT	Human esophagus Charcot-Leyden crystal (CLC) protein (lysophosphatidase) gene, promoter and exon 1
6489	16847	28516	1.75	2.0E-45	BE72184.1	EST_HUMAN	6014677395_F1 NIH_MCC_67_Homo sapiens cDNA clone IMAGE:38705835 5'
8179	19471	28515	27.64	2.0E-45	BE264350.1	EST_HUMAN	MBR-A10923-109260-201-002_H109260_Homo sapiens cDNA
8516	18398	28952	3.96	2.0E-45	AA458707.1	EST_HUMAN	#B7121_Starkey fetal calf 537222_Homo sapiens cDNA clone IMAGE:3839195 similar to TRG114689_G114689_R-5L1_Y1.
8754	18608	28888	2.13	2.0E-45	AV723980.1	EST_HUMAN	TRG72903_X1 NC1 CGAP_Ox40_Homo sapiens cDNA clone IMAGE:2745868 3'
8794	18908	28899	2.13	2.0E-45	AV723980.1	EST_HUMAN	TRG72903_X1 NC1 CGAP_Ox40_Homo sapiens cDNA clone IMAGE:2745868 3'
9833	13246	13246	2.76	2.0E-45	11418157	NT	Homo sapiens calmodulin, voltage-dependent alpha 11 subunit (CaMCA11), mRNA

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Table 4
Single Exon Probes Expresses

Table 4
Single Exon Probes Expressed in Heart

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Table 4

Single Exon Proteins Expressed in Heart

Probe Seq ID No.:	Exon Seq ID No.:	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8694	17878		3.03	5.0E-46	BE784971.1	EST_HUMAN	601743406F1 NIH-MOC-88 Homo sapiens cDNA clone IMAGE-3880865 5' Homo sapiens chromosome 21 segment HS21C010
197	10169		0.41	5.0E-46	AL165210.2	NT	
3484	13400	23205	1.12	5.0E-46	BE671194.1	EST_HUMAN	748101_XL_Leprosy_dorsal root ganglion-Homo sapiens cDNA clone IMAGE-3279403 3' Yab1 (g191)_XL_Leprosy_dorsal root ganglion-Homo sapiens cDNA clone IMAGE-3279403 3'
3484	13400	23206	1.12	5.0E-46	BE671194.1	EST_HUMAN	has880f1_XL_CGAP_Kidney_Homo sapiens cDNA clone IMAGE-2288767 3' similar to TR-076202
0039	15942	28074	1.79	5.0E-46	BF500442.1	EST_HUMAN	602921164f1_NCI_CGAP_Brig7_Homo sapiens cDNA clone IMAGE-4156070 5'
6144	16017	28165	3.52	5.0E-46	BF500422.1	EST_HUMAN	hs6469f1_NCI_CGAP_SS11_Homo sapiens cDNA clone IMAGE-1104520 3' similar to gb:hs3741_maf1 FIBULIN1, isoform A PRECURSOR (HUMAN).
626	10462		1.51	4.0E-46	AA801143.1	EST_HUMAN	
1676	11678	21446	3.57	4.0E-46	AV770544.1	EST_HUMAN	LYSO22ME_C PRECURSOR (HUMAN) contains element MER37 repetitive element; LYSO22ME_C PRECURSOR (HUMAN) contains element ME37 repetitive element;
1676	11576	21447	3.57	4.0E-46	AV770544.1	EST_HUMAN	LYSO22ME_C PRECURSOR (HUMAN) contains element MER37 repetitive element;
2710	12573	22464	3.55	4.0E-46	MB048.1	NT	Human endogenous retrovirus RTV-4C
4320	14217	28900	1.07	4.0E-46	AB014522.1	NT	Homo sapiens mRNA for KIAA0622 protein, partial cds
4320	14217	24000	1.07	4.0E-46	AB014522.1	NT	Homo sapiens mRNA for KIAA0622 protein, partial cds
6538	15256	25621	1.84	4.0E-46	MB048.1	NT	Human Ig gamma chain variable gene V region, partial cds
6338	16258	25063	1.34	4.0E-46	MB0852.1	NT	Human Ig gamma-3 heavy-chain gene V region, partial cds
9660	19221	25257	1.91	4.0E-46	A3902059.1	NT	Homo sapiens DNA for Human P2X0, complete cds
4284	14192	23976	0.8	3.0E-45	45503376.1	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 3 (MAPK3), mRNA
4696	14552	24343	1.13	3.0E-46	Z73860.1	NT	H_sapiens Ig lambda light chain variable region gene 7c_11.2 germline; Ig_Light_Lambda, V_lambda
4696	14552	24344	1.13	3.0E-46	Z73860.1	NT	H_sapiens Ig lambda light chain variable region gene 7c_11.2 germline; Ig_Light_Lambda, V_lambda
7061	16958	27161	8.3	3.0E-46	AB314462.1	EST_HUMAN	W149dC4_X1_NCI_CGAP_Lutrig1_Homo sapiens cDNA clone IMAGE-22406150 3' similar to contains THR_b2 THR repetitive element;
6856	18686	26955	2.65	3.0E-46	C29165.1	NT	Human mRNA for KIAA0626 gene, partial cds
819	10747	20594	5.91	2.0E-46	AA468046.1	EST_HUMAN	np_001717851_1 NCI_CGAP_C63 Homo sapiens cDNA clone IMAGE-880408 3' similar to contains THR_b2 THR repetitive element;
1542	11447		1.32	2.0E-46	AA670246.1	EST_HUMAN	zz27atf1_51 Scores field liver spoken 1NFLS_51 Homo sapiens cDNA clone IMAGE-451896 3'
1623	11527	21355	2.43	2.0E-46	U78027.1	NT	Human epsilon Bruton's tyrosine kinase (BTK), alpha-D_gelatoctease A (G_A), L44-iii (bsosomal protein (L-44), and F1TP3 (F1TP3) genes, complete cds

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Table 4

Single Exon Proteins Expressed in Heart

Probe SEQ ID NC:	Exon SEQ ID NC:	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Human Descriptor	
259ed21 Scores_Results_NH1 Homo sapiens cDNA clone MAGE:726850 5' similar to SVRSP1_MOUSE								
4899	14779	24555	1.15	2.0E-46	A3A9286.1	EST_HUMAN	Q01750 RSP1_P-PROTEIN;	
6418	16280	26442	6.78	1.17	2.0E-46	9011659_NH1	Mus musculus tail associated protein 1 (Sapb) mRNA	
6703	16853				B6C9091651.1	EST_HUMAN	601144567761 NIH_3T3 clone MAGIE:3849237_5'	
8571	18459			1.87	2.0E-46	7057233_NH1	Homo sapiens small acidic protein (MAGE:726552), mRNA	
9469	19829			1.75	2.0E-46	BF026854.1	EST_HUMAN	60176822581 NIH_3T3 clone MAGIE:3597328_5'
9728	19851	25139	1.44	2.0E-46	H48891.1	EST_HUMAN	yJ32001_x1 Scores liver spleen cDNA clone MAGIE:209977_5'	
1213	11121	23970	5.19	1.0E-46	AV727724.1	EST_HUMAN	6017803_x1 NCI COA LU4 Homo sapiens cDNA clone IMAGE:2756189_3'	
2238	12121	22023	4.6	1.0E-46	AV727724.1	EST_HUMAN	Homo sapiens cell division cycle 10 (Cdc10) mRNA [GEO:GSE10] (GEO:GSE10) mRNA	
2381	12231	22128	2.59	1.0E-46	H87390.1	EST_HUMAN	EST:3800268 WATM1 Homo sapiens cDNA clone IMAGE:488056	
3211	13135	22026	2.81	1.0E-46	AA631919.1	EST_HUMAN	np_078002.51 NCI COA-P Prostate tissue cDNA clone IMAGE:1132365 similar to Cdc42_3 (GEO:GSE10)	
4772	14456			4.18	1.0E-46	AB023197.1	EST_HUMAN	EST:3800268 WATM1 Homo sapiens cDNA clone IMAGE:488056
6496	15414	25477	5.66	1.0E-46	EF1164107.1	EST_HUMAN	EST:3800268 WATM1 Homo sapiens cDNA clone IMAGE:488056	
6858	19449	26539	1.0E-46	8923742_C	EST_HUMAN	EST:3800268 WATM1 Homo sapiens cDNA clone IMAGE:488056		
6858	19449	26539	5.66	1.0E-46	8923742_C	EST_HUMAN	EST:3800268 WATM1 Homo sapiens cDNA clone IMAGE:488056	
8236	15414	26440	5.66	1.0E-46	8923742_C	EST_HUMAN	EST:3800268 WATM1 Homo sapiens cDNA clone IMAGE:488056	
9168	18923	26548	4.26	1.0E-46	BF164707.1	EST_HUMAN	EST:3800268 WATM1 Homo sapiens cDNA clone IMAGE:488056	
9168	18923	26548	1.43	1.0E-46	BF591122.1	EST_HUMAN	EST:3800268 WATM1 Homo sapiens cDNA clone IMAGE:488056	
9625	18997	26548	1.43	1.0E-46	BF591102.1	EST_HUMAN	EST:3800268 WATM1 Homo sapiens cDNA clone IMAGE:488056	
749	10679		4.51	5.0E-47	AV716377.1	EST_HUMAN	AV716377 DCB Homo sapiens cDNA clone DBCA1E03_5'	
4846	14729	24512	2.61	5.0E-47	AV7709226.1	EST_HUMAN	H26d04_1 NCI CGA/P_L224 Homo sapiens cDNA clone IMAGE:3000933_3' similar to TRO:5703_O75703	
9882	19817	25601	1.84	5.0E-47	11417860_NH1	EST_HUMAN	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA	
1766	11685	21589	14.02	8.0E-47	Y185936.1	EST_HUMAN	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA	
1766	11685	21589	14.02	8.0E-47	Y185936.1	EST_HUMAN	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA	
2864	12516	22459	1.74	8.0E-47	5455955_NH1	EST_HUMAN	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), epsilon isoform (PP2BNE1) mRNA	
2869	12917	22712	1.72	8.0E-47	A3Z20043.1	EST_HUMAN	Homo sapiens B56 binding between A1 and GBR1 on chromosomes 21q22, segment 373	
2861	12370	22206	3.05	8.0E-47	AL1652246.2	EST_HUMAN	Homo sapiens B56 binding between A1 and GBR1 on chromosomes 21q22, segment 373	
7344	17212	27411	6.27	8.0E-47	AY651689.1	EST_HUMAN	Iz89d12_21 NCI CGA-Kid11 Homo sapiens cDNA clone IMAGE:2296559_3'	
5983	15683	25690	5.27	8.0E-47	11422972_NH1	EST_HUMAN	Homo sapiens CHC37 (cell division cycle 37, S. cerevisiae, homolog) (CDC37), mRNA	
8174	16002		3.91	8.0E-47	M7850.1	EST:10078 Fetal brain, Striagium (cat#95268) Homo sapiens cDNA clone IMAGE:7		

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Table 4

Single Exon Probes Expressed In Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1379	11284	21140	3.41	4.0E-47	66575566	NT	Human sapiens EtA binding protein p300 (EP300) mRNA
6938	16816	27098	2.05	4.0E-47	665616483.1	EST_HUMAN	601289468571 NIH MGC_39 Homo sapiens cDNA clone IMAGE:39224837 5'
6938	16816	27098	2.05	4.0E-47	665616483.1	EST_HUMAN	601289468571 NIH MGC_39 Homo sapiens cDNA clone IMAGE:39224837 5'
8905	18713			4.84	4.0E-47	AV1615606.1	EST_HUMAN
6532	10474	22287	1.75	4.0E-47	60149763971 NIH MGC_38 Homo sapiens cDNA clone IMAGE:3899721 5'	EST_HUMAN	60149763971 NIH MGC_38 Homo sapiens cDNA clone IMAGE:3899721 5'
6532	10474	22288	1.75	3.0E-47	665617634.1	EST_HUMAN	60149763971 NIH MGC_38 Homo sapiens cDNA clone IMAGE:3899721 5'
861	10730	26571	5.17	3.0E-47	N497583.1	EST_HUMAN	60149451 Homo sapiens cDNA clone IMAGE:277327 5'
830	10845	20703	8.9	3.0E-47	AL165294.2	NT	Human sapiens chromosome 21 segment [HS21C004] mRNA, partial cds
1984	11877	21770	1.5	3.0E-47	AB007899.1	NT	Human sapiens dual-specificity phosphatase (SSB1) mRNA, partial cds
3895	13196			4.90	3.0E-47	U83181.1	NT
4295	14164	23941	0.97	3.0E-47	MT2659.1	NT	Human T-cell receptor active alpha-chain mRNA from J.M cell line, complete cds
6659	15671	25986	4.26	3.0E-47	AV1048600.1	EST_HUMAN	U1-H-BMO-secd-0702011 NIH MGC_38 Homo sapiens cDNA clone IMAGE:3035205 5'
6659	15671	25987	4.26	3.0E-47	AV1048600.1	EST_HUMAN	U1-H-BMO-secd-0702011 NIH MGC_38 Homo sapiens cDNA clone IMAGE:3035205 5'
5923	15958			1.89	3.0E-47	AL2223413.1	EST_HUMAN
142	10116	19936	4.27	4.50E-47	4520518	NT	Human sapiens chromosome 21 segment [HS21C009] mRNA
962	10876	20722	2.16	2.0E-47	AL163209.2	NT	Human sapiens chromosome 21 segment [HS21C009]
962	10876	20723	2.18	2.0E-47	AL163209.2	NT	Human sapiens chromosome 21 segment [HS21C009]
1548	11453			1.18	2.0E-47	AL869279.1	EST_HUMAN
1575	11479	21338	1.22	2.0E-47	79821008	NT	wgdb02.x1 CG5 Hom sapiens cDNA clone IMAGE:2479891 3'
1654	11557	21420	4.44	2.0E-47	AA504514.1	EST_HUMAN	Human sapiens chromosome 21 segment [HS21C009] mRNA
2165	12072	21974	2.3	2.0E-47	AF060055.1	NT	Human sapiens protein kinase like endonuclease zinc finger protein (PLZF) gene, complete cds
4251	14150	23924	1.96	2.0E-47	45204866	NT	Human sapiens nrg-1 neu protein (CISH/Ca type B) mRNA
4287	14166	23987	1.75	2.0E-47	AA1569602.1	EST_HUMAN	inf229g07.51 NCI CGAP_Pt1 Homo sapiens cDNA clone (MGC:5914682
4287	14166	23988	1.75	2.0E-47	AA1569602.1	EST_HUMAN	inf229g07.51 NCI CGAP_Pt1 Homo sapiens cDNA clone (MGC:5914682
4406	14300	24084	2.09	2.0E-47	5174648	NT	Human sapiens Rar1 activation domain binding protein-related (RAB-R) mRNA
4707				1.1	2.0E-47	AV109516.1	EST_HUMAN
6655	15549	26537	1.6	2.0E-47	BET78475.1	EST_HUMAN	ES137236 mRNA:rescuevector, MCh Homo sapiens cDNA clone IMAGE:3867487 5'
6655	15549	26538	1.6	2.0E-47	BET78475.1	EST_HUMAN	60149393271 NIH MGC_57 Homo sapiens cDNA clone (MGC:5867487) 5'
6532	15649			1.33	2.0E-47	L09731.1	NT
6532	15649			2.1	2.0E-47	DR87675.1	NT
6843	16523	26716	2.1	2.0E-47	DR87675.1	NT	Human sapiens DNA for amyloid precursor protein, complete cds
6843	16523	26717	2.1	2.0E-47	DR87675.1	NT	Human sapiens DNA for amyloid precursor protein, complete cds
7080	16937	27127	1.77	2.0E-47	AF071771.1	NT	Human sapiens SPH-Eating factor mRNA, partial cds
9070	10116	19836	5.77	2.0E-47	4520518	NT	Human sapiens myelin phosphatases, target subunit 2 (MYPFT2), mRNA

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NC:	Exon SEQ ID NC:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) HH BLAST E Value	Top HH Accession No.	Top Hit Database Source	Top Hit Descriptor
9219 19058	24988	1.98	2.0E-47	R42423.1	EST_HUMAN	yf82d.51 Scores infant brain NIH_Homo sapiens cDNA clones IMAGE:289690_3' similar to contains OFF repetitive element;	
9237 19859		1.32		NT		Homo sapiens chromosome 21 segment HS21C000	
1393 11288	21112	4.5	1.0E-47	A0354526.1	EST_HUMAN	HH023.1 Scores fetal lung NIH_Homo sapiens cDNA clone IMAGE:3911189_3'	
3749 13602	23443	0.78	1.0E-47	BE280477.1	EST_HUMAN	601158321F1_NIH_HMG_C_21_Homo sapiens cDNA clone IMAGE:37398863_5'	
3749 13602	23444	0.79		NT		601158322F1_NIH_Homo sapiens cDNA clone IMAGE:37398863_5'	
6006 14852	24546	2.59	1.0E-47	AV16130077.1	EST_HUMAN	RC5-ST0197-230400_017-h02_ST0197_F-Homo sapiens cDNA clone IMAGE:23555863_3' similar to gb:MM22995	
6194 15854	28095	7.88	1.0E-47	AB08089861	EST_HUMAN	RAS RELATED PROTEIN RAB-1A (HUMAN)	
7928 17778	28017	1.75	1.0E-47	L30115.1	NT	Fiplo hamartoma acidomatoprotein genes (ADH) gene, 5' region	
1566 11469	21368	2.34	8.0E-48	AF222381.1	NT	Homo sapiens calcium channel epsilon 1 subunit (CACNA1E) gene, exons 7-46, and partial cds, alternatively spliced	
3519 13425	23226	0.83	9.0E-48	BE2805947.1	EST_HUMAN	CM24ATD100_310700_290-05_M70100_Homo sapiens cDNA	
8460 18333	26565	3.22	9.0E-48	BS598513.1	EST_HUMAN	60131047651_NIH_HMG_C_44_Homo sapiens cDNA clone IMAGE:2332063_5'	
1230 11138	11158	1.32	1.0E-48	4501900	NT	Homo sapiens enolase class 1 (ACT1), mRNA	
1231 11138		1.51	1.0E-48	4501900	NT	HE1b103.1X1_NCI_CCOAP_Lyn121_Homo sapiens cDNA clone IMAGE:3001133_3' similar to gb:X64707	
3096 13023	22818	3.62	8.0E-48	AV768477.1	EST_HUMAN	BREAST BASIC CONSERVED PROTEIN 1 (HUMAN)	
3096 13023	22819	3.62	8.0E-48	AV768477.1	EST_HUMAN	HE1b103.1X1_NCI_CCOAP_Lyn121_Homo sapiens cDNA clone IMAGE:3001133_3' similar to gb:X64707	
482 10428		1.37	7.0E-48	AB033035.1	NT	Homo sapiens mRNA for KIAA209 protein, partial cds	
483 10428		13.37	7.0E-48	AB033035.1	NT	Homo sapiens mRNA for KIAA209 protein, partial cds	
1482 11187	21250	1.12	7.0E-48	8912719	NT	Homo sapiens tudor like kinase 1 (TLK1), mRNA	
1620 11824	21382	3.49	7.0E-48	5730538	NT	Homo sapiens SRY domain box matrix transposase fusion gene (STTMAR), mRNA	
6947 16852	25975	22.88	7.0E-48	11410851	NT	Homo sapiens synleucine synthetase (SRSN), mRNA	
7275 17270	27348	1.52	6.0E-48	AF028816.1	NT	Homo sapiens putative oncogene protein mRNA, partial cds	
7500 17270	21777	1.9	6.0E-48	11427428	NT	Homo sapiens hypothetical protein FLJ11006 (FLJ11006), mRNA	
7567 17436	27654	3.36	6.0E-48	AA149060.1	EST_HUMAN	CA47b15_1 Strategic hunt neuron (#637233) Homo sapiens cDNA clone IMAGE:6372627_3' similar to contexts A/B peptide repeat,	
3269 15007	22969	1.39	5.0E-48	48208891	NT	Homophilic phosphotyrosine 14, catenulin-dependent (PDE14), mRNA	
8325 18202	28485	3.55	4.0E-48	AB204240.1	EST_HUMAN	HA476021_NCI_CCOAP_P28_Homo sapiens cDNA clone IMAGE:2284154_3'	
1363 11209	21124	0.92	3.0E-48	AV690654.1	EST_HUMAN	AV690654_GCK_Homo sapiens cDNA clone GCKIRE12.5'	
1633 11826	21710	18.97	3.0E-48	4886170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6), mRNA	
1633 11228	21711	18.97	3.0E-48	4886170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6), mRNA	

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NC:	CRF SEQ ID NC:	Exon SEQ ID NC:	Expression Signal	Meet Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3579	13463	28284	0.88	3.0E-48	AVI684631.1	EST_HUMAN	H146-2.1x INCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:20722553 similar to SW:DCRB_HUMAN P56655 DOWN SYNDROME CRITICAL REGION PROTEIN B1; MRY-BT0657-060400-201+610 BT0657_Homo sapiens cDNA clone IMAGE:12191373 similar to contains PT1RS b1
55622	15507	28582	2.35	3.0E-48	BE084571.1	EST_HUMAN	intron5.51 INCL_CGAP_Pt22_Homo sapiens cDNA clone IMAGE:3062673 similar to PT1RS repetitive element;
6889	16768		2.86	3.0E-48	AA668600.1	EST_HUMAN	H147-1.1x INCL_CGAP_Su57_Homo sapiens cDNA clone IMAGE:3062673
8248	18128	28376	1.18	3.0E-48	AA531940.1	EST_HUMAN	infrerf Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR17-25 TCANP D384.2 feline pre-B cell acute lymphoblastic leukemia Taylor-HGS/C projectTCBA Homo sapiens cDNA clone TCBA/P384.2
4431	14526	24114	1.35	2.0E-48	BE240655.1	EST_HUMAN	AK18915.1 INCL_CGAP_Pt12_Homo sapiens cDNA clone IMAGE:11010723'
6553	15465	25539	72.23	2.0E-48	AA613171.1	EST_HUMAN	AK18901.51 INCL_CGAP_Pt12_Homo sapiens cDNA clone IMAGE:11010723'
5553	15465	25540	72.29	2.0E-48	AB040684.1	EST_HUMAN	AK18901.51 INCL_CGAP_Pt12_Homo sapiens cDNA clone IMAGE:11010723'
6440	16801	28464	4.29	2.0E-48	AB040684.1	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
6440	16801	28465	4.29	2.0E-48	AB040684.1	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
6447	16908	28473	2.6	2.0E-48	11492289	NT	Homo sapiens viral telomere repressor nucleophosmin mRNA oncogene homolog A (nuclear factor of kappa light polypeptide gene enhancer in B-cells 3 (hexy) (RELA)) mRNA AK74545.1
6984	15143	28930	2.39	2.0E-48	AVT723451.1	EST_HUMAN	AK74545.1 Homo sapiens cDNA clone CBCCOG10.5
9184	15082	24828	2.45	2.0E-48	AA465007.1	EST_HUMAN	Z268003.1 Scores every tumor NIH3T3_Homo sapiens cDNA clone IMAGE:810052.2
0511	19579	28570	1.63	2.0E-48	BE737154.1	EST_HUMAN	601303004F1 NIH_3T3_Homo sapiens cDNA clone IMAGE:3839762.6
50	10337	19844	0.85	1.0E-48	77008534	NT	Homo sapiens cyclin I/reassess-associated overexpressed protein (LOC51747) mRNA
856	10782	20682	6.93	1.0E-48	46501695	NT	Homo sapiens amyloid beta (A4) precursor protein (prolease-resinil, Alzheimer disease) (APP) mRNA
1274	11182	21032	3.26	1.0E-48	5032032	NT	Homo sapiens RNA binding motif protein (fBmbo) mRNA
1876	11776	21648	44.65	1.0E-48	AL165302.2	NT	Homo sapiens chromosome 21 segment HS21C012
3443	13360	23167	1.23	1.0E-48	AL167246.2	NT	Homo sapiens chromosome 21 segment HS21C016
6032	14652	24728	1.1	1.0E-48	M10978.1	NT	Human endogenous retrovirus DNA (+1), complete retroviral segment
6303	16167	28325	2.21	1.0E-48	4751517	NT	Homo sapiens mRNA for KIAA1245 protein, partial cds
7337	17205	27404	5.72	1.0E-48	AB039307.1	NT	AK1883006F1 NIH_3T3_Homo sapiens cDNA clone IMAGE:4122119.5
7526	17377	27588	4.48	1.0E-48	BF204683.1	EST_HUMAN	Homo sapiens B cell linker protein (SLP) mRNA
7934	17784	28023	5.08	1.0E-48	14123090	NT	Homo sapiens B cell linker protein (SLP) mRNA
7934	17784	28024	5.03	1.0E-48	14123089	NT	Homo sapiens B cell linker protein (SLP) mRNA
88659	18802	28905	1.73	1.0E-48	AF191917.1	NT	Homo sapiens dopamine transporter (SLC6A3) gene, complete cds
9145	19005		1.56	1.0E-48	W26785.1	EST_HUMAN	5561 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
5662	15501	25702	2.95	8.0E-48	1004947	NT	Mac musculus T-Rex 20 (Thz20) mRNA

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Table 4
Single Exon Probes Express

Single Exon Patches Expressed in Heart

Probe	Exon Seq ID NCI:	ORF Seq ID NO:	Expression Signal Value	Most Similar (Top) BLAT E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
							mRNA	mRNA
5692	16001	28703	2.65	8.0E-9	J04847	NT	Mice microsomal T-biotin transferase, 4'-trifluoromethyl ester 1 mRNA, partial cds	
5692	16708	128540	3.19	8.0E-9	J2850.1	NT	Homo sapiens 1,4,5-tris(3-hydroxypropyl)phosphate 26S subunit, ATPase, 4-(FSMCM4) mRNA	
134	13035	20157	1.47	7.0E-9	5729860	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4-(FSMCM4) mRNA	
134	13035	20158	1.47	7.0E-9	5729860	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4-(FSMCM4) mRNA	
388	10335	20157	1.74	7.0E-9	5729860	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4-(FSMCM4) mRNA	
388	10335	20158	1.74	7.0E-9	5729860	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4-(FSMCM4) mRNA	
389	10335	20157	1.98	7.0E-9	5729860	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4-(FSMCM4) mRNA	
389	10335	20158	1.98	7.0E-9	5729860	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4-(FSMCM4) mRNA	
1202	11112	20958	4.05	1.0E-9	J16294	NT	Homo sapiens chromosome 21 segment 2484T024.3	
4850	14443	24227	0.95	7.0E-9	C05811	SWISSPROT	W26041_X1 Homo sapiens NLR_T_QBC_S1_Homo sapiens cDNA clone IMAGE_23568603_3' similar to TR_0540423	
6351	15271	28100	1.80	7.0E-9	A097191-1	EST_HUMAN	O54623_X1 Homo sapiens IMAGE_200504_1 clone DK72P792C033 3'	
6557	16277	25107	1.34	7.0E-9	A125697-1	EST_HUMAN	DK72P792C033, st1762 (synonym: Irieel) Homo sapiens cDNA clone IMAGE_200504_1 clone IMAGE_200504_2 Mutein. L-type protein mRNA	
160	10162	19979	11.77	6.0E-9	AV731740.1	EST_HUMAN	RIBOSOMAL PROTEIN S1 (HUMAN); C05262 Mutein. L-type protein mRNA	
8500	18487	28738	2.92	6.0E-9	AV462526.1	EST_HUMAN	UH-B13-0-05-DU11a1 NCI CGAP Sub5 Homo sapiens cDNA clone IMAGE_30860468 3'	
8520	18728	29022	2.68	6.0E-9	AA935855.1	EST_HUMAN	EST77525_Pancras tumor III Homo sapiens cDNA 5' end	
8520	18728	29023	2.68	6.0E-9	AA935856.1	EST_HUMAN	EST77525_Pancras tumor III Homo sapiens cDNA 5' end	
9507	16468	20452	3.43	6.0E-9	KA071665.1	EST_HUMAN	2B25P11.1 Scorne, feta, liver, spleen, IFN-S, HIF-1 Homo sapiens cDNA clone IMAGE_467694_3'	
695	10628	20452	3.37	5.0E-9	AL165210.2	NT	Homo sapiens chromosome 21 segment H52_C010	
695	10628	20453	3.37	5.0E-9	AL165210.2	NT	Homo sapiens chromosome 21 segment H52_C010	
1753	11653	21524	1.94	5.0E-9	AAA77212.1	EST_HUMAN	72dZ007-1 Shagreenine neuropilin (RS723) Homo sapiens cDNA clone IMAGE_010860_5' similar to 2B25P11_NCI COCA_2 U6 Homo sapiens cDNA clone IMAGE_2057593_3' similar to NW_353056_2B	
2721	12583	22477	5.18	5.0E-9	U17714.1	NT	Homo sapiens prolactin tumor Suppressor ST13 (ST13) mRNA, complete cds	
3235	13169	22687	5.13	5.0E-9	11438355	NT	W26041_X1 NCI COCA_2 U6 Homo sapiens cDNA clone IMAGE_2057593_3' similar to NW_353056_2B	
514	10456	20296	3.746	4.0E-9	AV189535.1	EST_HUMAN	CE057070 ;	
9476	19710	20298	2.43	4.0E-9	AA2120788.1	EST_HUMAN	W26041_X1 NCI COCA_2 U6 Homo sapiens cDNA clone IMAGE_2057593_3' similar to NW_353056_2B	
548	10456	20298	3.3	4.0E-9	AF247986.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1)	
548	10456	20298	3.03	4.0E-9	X01261	NT	H. sapiens cDNA for acetyl-CoA carboxylase	

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar BLAST E Value	Top Hit Assessment No.	Top Hit Database Source	Top Hit Descriptor
2811	12479			2.01	3.0E-49	AA0161631.1	EST HUMAN Human type IV collagen (COL4A6) gene, exon 40 repetitive element;
4650	14768	24564	2.08	3.0E-49	UA66299.1	NT	
6366	16248	28450	9.6	3.0E-49	FB4479.1	EST HUMAN EST 267rd/2 NATH1 Homo sapiens cDNA clone 254#12	
8821	18487	28759	2.3	3.0E-49	AA3375951.1	EST HUMAN EST 425/2 Endometrial tumor /Homo sapiens cDNA 1K	
845	10552		2.66	2.0E-49	BB165980.1	EST HUMAN MR3-0487-150B00-113-101 HT0487 Homo sapiens cDNA	
3165	13190	22914	1.4	2.0E-49	NC26465.1	EST HUMAN Y25d06.11 Searce melanocyte 2b/Homo sapiens cDNA clone IMAGE:262571.5	
3521	13497	23235	0.93	2.0E-49	AF205854.1	NT	Homo sapiens RNA binding protein 1 (RBP1) gene, complete cds
4653	14579	24373	1.12	2.0E-48	AI017357.1	EST HUMAN gb X31470 RAS-LIKE PROTEIN TCF10 (HUMAN) contains Alu repetitive element; contains element MER22	
4704	14560	24381	1.25	2.0E-46	BF5611846.1	EST HUMAN UH-B14-02-2-CU-1st NCI CGAP Sub8 Homo sapiens cDNA clone IMAGE:3088358.3'	
9540	15943	26076	1.47	2.0E-49	AV717938.1	EST HUMAN EST 702588 PCB Homo sapiens cDNA clone IMAGE:3088359.0	
6777	16507		1.97	2.0E-49	WB60033.1	EST HUMAN EST 702588 PCB Homo sapiens cDNA clone IMAGE:3088360.0	
6467	16660		1.53	2.0E-46	AF163884.1	NT	Homo sapiens SHC1a (SHC1a) gene, complete cds, alternative spliced
881	16807		3.95	1.0E-49	BF036327.1	EST HUMAN 6001156571 NIH 3T3 fibroblast cDNA clone IMAGE:30882086.5	
1750	11859	21531	2.58	1.0E-49	BF0262616.1	EST HUMAN 6001156571 NIH 3T3 fibroblast cDNA clone IMAGE:30882087.5	
9229	15210	25011	4.97	1.0E-49	BF191007.1	EST HUMAN 6013000351 NIH 3T3 fibroblast cDNA clone IMAGE:30882082.5	
6287	16151	26308	2.93	1.0E-49	BF386100.1	EST HUMAN 6012933521 NIH 3T3 fibroblast cDNA clone IMAGE:30882083.5	
6322	16185		2.93	1.0E-49	BS398110.1	EST HUMAN 6012933521 Homo sapiens cDNA clone IMAGE:30882083.5	
6322	16185		26346	2.17	1.0E-49	NC26844.1	EST HUMAN similar to db X65975 KINESIN HEAVY CHAIN (HUMAN); similar to gba X65975 KINESIN HEAVY CHAIN (HUMAN);
6709	16869	26347	2.17	1.0E-49	NC26844.1	EST HUMAN Homo sapiens succinyl-CoA ligase, GDP-forming, alpha subunit (SUCCLG1), mRNA	
6709	16869	26771	1.29	1.0E-49	11321580.1	NT	Homo sapiens succinyl-CoA ligase, GDP-forming, alpha subunit (SUCCLG1), mRNA
7200	17077	27282	1.22	1.0E-49	AD060340.1	EST HUMAN 6013000351 NIH 3T3 fibroblast cDNA clone IMAGE:30882084.5	
7850	17880	27924	1.21	1.0E-49	AL043129.2	EST HUMAN DK724540/24223 r 134 (synonym: hsa3) Homo sapiens cDNA clone IMAGE:30882084.5	
8935	18495	28769	3.88	1.0E-49	18486.1	EST HUMAN Homo sapiens beta-1,4-hexosaminidase-acetyl-acceptor chain 1 (beta-Gal), mRNA	
9018	18813		1.73	1.0E-49	BE169343.1	EST HUMAN MR04-T10407-011002 HT0407 Homo sapiens cDNA	
9387	19035		2	1.0E-49	114113222	NT	Homo sapiens cadherin EGFR LAG sevenless G-type receptor 1 (GELS1), mRNA
14802	14802		1.06	0.0E-30	AIF01476.1	NT	Homo sapiens glycine N-methyltransferase (GNMT) gene, complete cds
163	1036	19851	2.59	0.0E-30	AL052322.2	NT	Homo sapiens chromosome 21 segment 1 (HS21) C02
702	10635	20460	1.89	0.0E-30	NR05097.2	NT	Homo sapiens mRNA for VIP receptor 2

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 Table 4
 Single Exon Probes Expressed in Heart

Probe Seq ID No:	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal Value	Most Similar BLAST E Value	Top Hit Assession No.	Top Hit Database Source	Top Hit Descriptor
702	10935	20461	1.89	8.0E-50	A/2005723.1	NT	Human sapiens mRNA for VIP receptor 2
1016	10932	-	1.21	6.0E-50	A/2005723.1	NT	Human sapiens noncoding 2'-diacylglycerate gene, complete cds
1727	11026	21497	2.51	6.0E-50	4591890 NT	Human sapiens scilin, alpha 1 (ACtN1) mRNA	
2452	12309	22204	1.36	8.0E-50	7706394 NT	Human sapiens p47 (LOC51674), mRNA	
2452	12309	22205	1.36	8.0E-50	7706394 NT	Human sapiens p47 (LOC51674), mRNA	
2865	12831	22421	1.69	8.0E-50	4826558 NT	Human sapiens capping protein (actin filament) muscle Z-line, beta (CAPZB), mRNA	
8711	18628	28911	2.1	8.0E-50	A/6346761.1	EST_HUMAN	662006_51 NCBI COAP_2 Human sapiens cDNA clone IMAGE:11308913 similar to gb:J05459
603	10539	20348	0.96	7.0E-50	A/8509591.1	EST_HUMAN	C12orf170(=C12orf170B) Human sapiens cDNA clone IMAGE:2458003 similar to contains MER29_b3
8139	18027	28273	9.52	7.0E-50	A/872157.1	EST_HUMAN	Wm5151_1X NCBI COAP_102 Human sapiens cDNA clone IMAGE:30365113 similar to contains MER29_b3
6701	16860	-	4.47	6.0E-50	B/0404761.1	EST_HUMAN	Mer29 repetitive element :
8130	18076	28326	3.17	6.0E-50	A/312079.1	EST_HUMAN	EST:142775 Jurkat T-cell VH Homo sapiens cDNA 5' end
8150	18076	28327	3.17	6.0E-50	A/312079.1	EST_HUMAN	EST:142775 Jurkat T-cell VH Homo sapiens cDNA 5' end
1762	11052	21522	0.85	8.0E-50	B/732298.1	EST_HUMAN	CM00-ET0702-3030560-368-005 BT0702 Human sapiens cDNA CM00-ET0702-3030560-368-005 BT0702 Human sapiens cDNA
1762	11052	21523	0.85	8.0E-50	B/732298.1	EST_HUMAN	CM00-ET0702-3030560-368-005 BT0702 Human sapiens cDNA CM00-ET0702-3030560-368-005 BT0702 Human sapiens cDNA
7225	17132	-	5.64	5.0E-50	A/557698.1	EST_HUMAN	H48H10_51 NCBI COAP_51 Human sapiens cDNA clone IMAGE:728585 similar to TRG133576/9
8961	18795	29088	1.85	8.0E-50	A/403053.1	EST_HUMAN	G1335769 GAG-POL(POLYPTEROIN);
899	10224	-	1.29	4.0E-50	A/601149.1	EST_HUMAN	2620h1.11 Scarce, Basal, NHT Human sapiens cDNA clone IMAGE:728585 similar to TRG133576/9
1886	11397	-	2.45	3.0E-50	M/51646.1	NT	Fibulin-1, ISOFORM A PRECURSOR (HUMAN);
3259	13182	22981	1.14	3.0E-50	A/7476142.1	EST_HUMAN	Human endogenous retrovirus RIV-H2
3602	13606	23302	4.6	3.0E-50	A/W765254.1	EST_HUMAN	CMV45 Human cardiac muscle expression library Human sapiens cDNA clone 4151985 similar to CMV45
8095	16939	26189	1.55	3.0E-50	11421514 NT	Human sapiens similar to Ceru domain, immunoglobulin domain (Ig), short basic domain, secreted, (eaminophorin) 3A (H sapiens) LOC32323, mRNA	
6505	16364	26540	4.01	3.0E-50	A/233495.2	NT	Human sapiens F1VE domain-containing dual specificity protein phosphatase F1VE-DSPh1 mRNA, complete cds
6505	16364	26541	4.01	3.0E-50	A/233495.2	NT	Human sapiens F1VE domain-containing dual specificity protein phosphatase F1VE-DSPh1 mRNA, complete cds
7349	17499	27721	1.17	3.0E-50	A/805651.1	NT	Human sapiens mRNA for Kif1a/15688 protein, partial cds
8750	17699	28163	6.94	3.0E-50	A/246521.1	NT	Human sapiens C7L gene

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Table 4
Single Exon Probes Express

Probe Seq ID No:	ORF Seq ID No:	Exon No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
							Top Hit ID	MtC class 1 region
761	10691	4.9t	2.0E-50	Af0550696.1	NT	Human sapiens midline 1 (Olfactomedin-binding) mRNA		
1053	10679	20623	4.6	2.0E-50	AF577102	Human sapiens decom 1 mRNA, complete cds; alternatively spliced		
1425	11390	21197	18.02	2.0E-50	AA135303.1	Human sapiens decom 1 mRNA, complete cds; alternatively spliced		
6524	16802	209956	6.27	2.0E-50	K09666.1	Human HALPH44 gamma for alpha-tubulin, exons 1-3		
6524	16802	209956	6.27	2.0E-50	K09666.1	Human HALPH44 gamma for alpha-tubulin, exons 1-3		
7886	17636	27761	1.63	2.0E-50	981102033	mRNA		
7886	17636	9612033	9.96	2.0E-50	981102033	Mus musculus keratin complex 2, gene 64 (Krt2-5g) mRNA		
235	10204	20616	1.53	2.0E-50	EST_HUMAN	EST_HUMAN		
235	10204	20616	1	1.0E-50	BE5007090.1	BE5007090.1 Human sapiens cDNA		
454	10368	20216	1	1.0E-50	AL136209.2	AL136209.2 Human sapiens chromosome 21 segment Hs21C006	EST_HUMAN	
2814	12165	172444	2.1	1.0E-50	AA027358.1	Human sapiens pseudocaudomatous region, segment 1/2	EST_HUMAN	
7375	12165	27450	9.98	1.0E-50	AA027358.1	Human sapiens pseudocaudomatous region, segment 1/2	EST_HUMAN	
4467	14961	24151	1.22	9.0E-50	AA027358.1	Human sapiens pseudocaudomatous region, segment 1/2	EST_HUMAN	
6610	16369	28546	4.89	8.0E-50	AA016042.1	Human sapiens P27-73 protein (P27-35kDa endoprotein 1)	EST_HUMAN	
7148	171267	229607	1.28	8.0E-50	AAU38660.1	Human sapiens P27-73 protein (P27-35kDa endoplasmic reticulum protein)	EST_HUMAN	
3245	13196	229607	7.46	8.0E-50	AAU38660.1	Human sapiens P27-73 protein (P27-35kDa endoplasmic reticulum protein)	EST_HUMAN	
3417	11298	20042	0.83	7.0E-51	AAV27420.1	Human sapiens KIF11 (Kinesin family member 11) mRNA	EST_HUMAN	
4078	13978	23767	1.25	7.0E-51	AL073628.1	Human sapiens KIF11 (Kinesin family member 11) mRNA	EST_HUMAN	
4078	13978	23767	1.25	7.0E-51	AL073628.1	Human sapiens KIF11 (Kinesin family member 11) mRNA	EST_HUMAN	
4254	14163	28927	2.38	7.0E-51	AAV27420.1	Human sapiens KIF11 (Kinesin family member 11) mRNA	EST_HUMAN	
1936	11831	21714	5.3	0.0E-51	7657209	Human sapiens KIAA0029 protein Muc2 interacting nucleic acid binding (MINT) homolog (KIAA0029), mRNA	NT	
3428	13345	23510	1.29	6.0E-51	7657209	Human sapiens KIAA0029 protein Muc2 interacting nucleic acid binding (MINT) homolog (KIAA0029), mRNA	NT	
4212	14110	238957	0.78	6.0E-51	98110523	Human sapiens soluble carrier family 2 (facilitated glucose transporter) member 9 (SLC2A9), mRNA	NT	
4212	14110	238958	0.78	6.0E-51	98110523	Human sapiens soluble carrier family 2 (facilitated glucose transporter) member 9 (SLC2A9), mRNA	NT	
5645	155623	268561	2.78	6.0E-51	98110523	Human sapiens solute carrier family 1 (MCK1) gene, exon 3	NT	
5650	155623	268565	6.68	6.0E-51	AF070063.1	Human sapiens mitogen-activated protein kinase kinase 1 (MAPKK1) gene, exon 4	NT	
6550	16116	248557	6.68	6.0E-51	AF070063.1	Human sapiens mitogen-activated protein kinase kinase 1 (MAPKK1) gene, exon 4	NT	
6550	16116	248559	2.16	6.0E-51	AAV27420.1	Human sapiens cation channel anion molecule (LCG51-16), mRNA	NT	
8580	18448	287116	1.72	6.0E-51	112616256	Human sapiens interleukin-1 receptor (IL17R), mRNA	NT	

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLASTe Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
774	10704	20543	10.92	5.0E-51	AL165203.2	NT	Homo sapiens chromosome 21 segment HS2/0003
786	10715	20557	1.47	5.0E-51	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TAM1) mRNA
975	12882	20745	1.37	5.0E-51	AL133204.1	NT	Novel human gene mapping to chromosome X
1560	11464	21354	0.84	5.0E-51	50321860	NT	Homo sapiens T-cell proliferation-associated protein homolog (PCH11) mRNA
2548	12422	22311	11.48	5.0E-51	AJ017658.1	NT	Homo sapiens mRNA for nucleoprotein 155
3863	13774	235866	1.08	5.0E-51	NA00538.1	NT	Homo sapiens mRNA for nucleoprotein 155
3863	13774	235867	1.08	5.0E-51	NA00538.1	NT	Human Ku (p105/p80) subunit mRNA, complete cds
5004	14879	24649	2.34	5.0E-51	AB037832.1	NT	Homo sapiens mRNA for KIAA411 protein, full cds
8861	18469	26139	3.72	5.0E-51	5862195	NT	Homo sapiens RNA, Uncharacterized novel protein (FBXO19). mRNA
130	10104	19826	0.92	3.0E-51	AJ88748.1	EST_HUMAN	1st cDNA NCL CGAP_Pant Homo sapiens cDNA clone IMAGE:22247120 3' similar to gb:NM_002328
1166	11072	20917	4.16	3.0E-51	AJ88748.1	EST_HUMAN	KERATIN, TYPE I CYTOSKELETA 18 (HUMAN);
4232	14430	23936	2.13	3.0E-51	AL159142.1	NT	1st cDNA NCL CGAP_Pant Homo sapiens cDNA clone IMAGE:22247120 3' similar to gb:NM_002328
6474	16333	26560	1.73	3.0E-51	R18014.1	EST_HUMAN	Novel human gene mapping to chromosome 22
7131	17003	6.87	3.0E-51	MG0563.1	NT	RE TROVIRUS-RELATED POL POLYPROTEIN (HUMAN):contains LTRs repetitive element;	
9875	19233		1.58	3.0E-51	AF005252.1	NT	Homo sapiens mRNA for amorphous extracellular glycoprotein
362	10318	20139	1.81	2.0E-51	4807788	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
673	10607	20424	1.08	2.0E-51	BE391063.1	EST_HUMAN	60128590441_NHLMG_44_Homo sapiens cDNA clone IMAGE:3601463 5'
673	10607	20445	1.08	2.0E-51	BE391063.1	EST_HUMAN	60128590441_NHLMG_44_Homo sapiens cDNA clone IMAGE:3601463 5'
1662	11854	21431	2.24	2.0E-51	AA233525.1	EST_HUMAN	Z304015.1 Streptagene N12 neuronal precursor 39/326 RTV-L PROTEIN; point mutation LTR/B, LTR/T repetitive element;
3672	13580	23373	2.21	2.0E-51	AL1692415.1	EST_HUMAN	U27905.1 NCI CGAP_KR111Homo sapiens cDNA clone IMAGE:2131732 3'
4592	14288	24071	1.02	2.0E-51	AV3137262.1	EST_HUMAN	U1-H-B1-44-14-02-03-U1 at NCI CGAP_KR111Homo sapiens cDNA clone IMAGE:27116851 3'
6852	15673	24650	2.98	2.0E-51	BE782915.1	EST_HUMAN	60128590441_NHLMG_57_Homo sapiens cDNA clone IMAGE:3875683 5'
7047	16824	27114	1.61	2.0E-51	BE091984.1	EST_HUMAN	60167670751_NHLMG_21_Homo sapiens cDNA clone IMAGE:3869613 5'
7478	17348	27552	1.68	2.0E-51	AB107078.1	EST_HUMAN	U74807.1 NCI CGAP_S03_Homo sapiens cDNA clone IMAGE:2239580 3' similar to SW:TRKC_HUMAN
7539	17590	27600	6.26	2.0E-51	BE105980.1	EST_HUMAN	Q16288_N-3 GROWTH FACTOR RECEPTOR PRECURSOR;

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 Table 4
 Single Exon Probes Expressed in Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7902	17812	28054	1.71	2.0E-81	AV682474.1	EST_HUMAN	AV682474 GKB Homo sapiens cDNA clone [GKB/GF05 5' similar to SWNAME1 MOUSE
8640	15259	25054	8.63	2.0E-81	AT1732851.1	EST_HUMAN	cd3-f1B9.5 INCL CGAP_ Kids Homo sapiens cDNA clone MAGIE_132509 3' similar to SWNAME1 MOUSE
8640	15259	25055	8.63	2.0E-81	AT1732851.1	EST_HUMAN	cd3-f1B9.5 INCL CGAP_ Kids Homo sapiens cDNA clone MAGIE_132509 3' similar to SWNAME1 MOUSE
9668	10227	25240	1.33	2.0E-81	11419159 NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (thrakox (Dicephali) homolog); translocated to 4q11.4, mRNA	
108	10980	18905	4.4	1.0E-51	45050526 NT	Homo sapiens eukaryotic translation initiation factor 4A, isoform 1 (Eif4A1) mRNA	
1478	11383	2271	1.0E-51	AT742246.1	EST_HUMAN	AT742246 CB Homo sapiens cDNA clone [CSEPCDC12.5'	
4306	14206	25059	0.98	1.0E-51	4758071 NT	Homo sapiens small inducible cytokine subfamily A (Cpx-CyA), member 15 (SCYIA5) mRNA	
4306	14206	25060	0.98	1.0E-51	4758071 NT	Homo sapiens small inducible cytokine subfamily A (Cpx-CyA), member 15 (SCYIA5) mRNA	
5310	15231	25056	3.12	1.0E-51	T18862.1	EST_HUMAN	hs.20581 testis 1 Homo sapiens cDNA clone b1.20586
6689	19771		3.57	1.0E-51	AV780590.1	EST_HUMAN	AV780590 MDS Homo sapiens cDNA clone NSCB8B02 5'
6689					256407.1 Scores, test, live -opheo_1NE_S1 Homo sapiens cDNA clone IMAGE_1446500 3' similar to		
6454	19896		3.28	9.0E-52	AA4777621.1	EST_HUMAN	contains TLR3 THR repetitive element;
146	10120	10059	7.31	8.0E-52	AA720574.1	EST_HUMAN	mx21g02.1 NT1 CGAP_ GCB0 Homo sapiens cDNA clone IMAGE_1241138 3' similar to contains TIR_13
1481	11385	21249	1.33	8.0E-52	X84900.1	NT	THR repetitive element;
1653	11537	21387	2.05	8.0E-52	11686028 NT	H. sapiens mRNA for laminin-5, alpha5 chain	
1653	11537	21388	2.05	8.0E-52	11686028 NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556) mRNA	
3913	11537	21387	6.44	8.0E-52	11686028 NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556) mRNA	
3913	11537	21388	6.44	8.0E-52	11686028 NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556) mRNA	
7211	17088	21226	1.48	7.0E-52	W58471.1	EST_HUMAN	cd259d0.1 Scores, parathyroid, tumor_NHPA_Homo sapiens cDNA clone IMAGE_3225978 5' similar to
1170	11682		0.88	6.0E-52	BE572409.1	EST_HUMAN	cd259d0.1 Scores, parathyroid, tumor_NHPA_Homo sapiens cDNA clone IMAGE_3225978 5' similar to
1068	11570	21430	2.25	6.0E-52	AF109807.1	NT	cd259d0.1 NT1 CGAP_Bm02 Homo sapiens cDNA clone IMAGE_2201971 5' similar to
8540	18412	28678	2.23	6.0E-52	BE048172.1	EST_HUMAN	SW-PRBM_MOUSE_05793 BASEMENT MEMBRANE-SPECIFIC HEPARAN SULFATE PROTEOGLYCAN CORE PROTEIN PRECURSOR ;

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4340	14237	24021	2.07	5.0E-52	Z78988.1	NT	H sapientis flow-sorted chromosome 6 H1null fragment; SCOPd181f
16591	11543	21402	0.93	4.0E-52	AF257316.1	NT	Homo sapiens Sh3-containing protein Sh3-LB1 mRNA, complete cds
1748	11648	21516	8.58	4.0E-52	4758853 NT	NT	Homo sapiens nucleophosmin 1550kDa (NUP155) mRNA
3950	131761	23554	0.82	4.0E-52	45017500 NT	NT	Homo sapiens T-cell lymphoma initiation and maintenance 1 (TAN1) mRNA
68666	16666	26760	1.24	4.0E-52	BE56263282.1	EST_HUMAN	60114069771 NIH MGC-122 Homo sapiens cDNA clone [MGC35168] 6
69665	16843	27055	7.25	4.0E-52	114170255 NT	EST_HUMAN	Homo sapiens hydroxylase 4 (HSD17B4) dehydrogenase 4 (HSD17B4) mRNA
9251	18952	425	4.25	4.0E-52	114181771 NT	EST_HUMAN	Homo sapiens R3 Phase activating protein 2 (RANGAP1) mRNA
9778	16283	5	5.09	4.0E-52	AB002059.1	NT	Homo sapiens DNA for Human P2X6, complete cds
4052	13903	5	0.93	4.0E-52	AB002059.2	NT	Homo sapiens Hypothetical protein FLJ00757 (FLJ00757), mRNA
550	10491	20296	1.39	2.0E-52	M109785.1	NT	Human endogenous retrovirus DNA (+1), complete retroviral segment
650	10491	23530	1.39	2.0E-52	M109785.1	NT	Human endogenous retrovirus DNA (+1), complete retroviral segment
2460	12927	22226	1.75	2.0E-52	BE207675.1	EST_HUMAN	b6B067071 NIH MGC-9 Homo sapiens cDNA clone [MAGE-3030421] 5' similar to G3X16492 M mucusulin
2716	12865	2053	2.0E-52	2.0E-52	BF6717892.1	EST_HUMAN	Novel human gene mapping to chromosome 20, similar to membrane transcribers
4062	14782	24567	2.74	2.0E-52	AL1371988.3	NT	b6B0714-2312600463-E12 CT0214 Homo sapiens cDNA clone [G3X16492]
5467	15416	28479	2.74	2.0E-52	AV846041.1	EST_HUMAN	Human endogenous retrovirus 21 receptor (L2R2), mRNA
6941	15747	25890	1.49	2.0E-52	AF47850.1	NT	Measles virus nucleic acid-binding mRNA, complete cds
7028	16865	839	0.39	2.0E-52	AF47850.1	NT	(NDURFS) mRNA
7488	17207	1	1.98	2.0E-52	47587989 NT	NT	Homo sapiens NDH dehydrogenase (ubiquinone) F-S protein 1 (NDH) (NDH-Q reductase)
7825	17676	27918	4.53	2.0E-52	5730038 NT	NT	Homo sapiens SET domain and matrix transposase fusion gene (SET/MAR) mRNA
7825	17675	27919	4.53	2.0E-52	5730038 NT	NT	Homo sapiens SET domain and matrix transposase fusion gene (SET/MAR) mRNA
8556	18408	28571	5.33	2.0E-52	AI531462.1	EST_HUMAN	Wf460A-X1 NCI_CGAP_Lutrig1 Homo sapiens cDNA clone [MAGE-2406] 5' similar to contains Th-IR,b2
8556	18408	28672	5.33	2.0E-52	AI531462.1	EST_HUMAN	Wf460A-X1 NCI_CGAP_Lutrig1 Homo sapiens cDNA clone [MAGE-2406] 5' similar to contains Th-IR,b2
6547	18149	28689	3.09	2.0E-52	AV715377.1	EST_HUMAN	AV715377 DQB1 Homo sapiens cDNA clone DQB1c03 5'
6559	18448	27919	2.09	2.0E-52	W020561	EST_HUMAN	2469-12-1 Source: fetal heart: NBBH19W Homo sapiens cDNA clone MAGE-2406 5'
68891	18701	3	3.22	2.0E-52	11417890 NT	NT	Homo sapiens LIM domain kinase 2 (LIMK2), mRNA
9101	19756	24894	8.86	2.0E-52	AV2826287.1	EST_HUMAN	60114069771 NIH MGC-122 Homo sapiens cDNA clone [MAGE-2700046] 3' similar to contains Alu repetitive element,contains element:LT2 repetitive element;
9406	19112	24895	4.28	2.0E-52	AI865965.1	EST_HUMAN	Wf7605-X1 Source: G3C S11 Homo sapiens cDNA clone MAGE-2390046 3' similar to TRC165359
522	10484	20276	1.37	1.0E-52	AJ654445.1	EST_HUMAN	Q16850 CARBOXYESTERASE;
							2475n-12-1 Source: fetal heart: NBBH19W Homo sapiens cDNA clone MAGE-744879 3'

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Table 4

Single Exon Primates Expressed in Heart

Probe Seq ID	Exon Seq ID	ORF Seq ID No.: NC_	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
							Top (Top) Hit	BLAST E Value
1349	11255	21111	8.25	1.0E-52	45404265	NT	Homo sapiens diutinane emminia lipoase (glutamine synthase) (GLUL) mRNA	
2489	12364		1.2	1.0E-52	45022588	NT	Homo sapiens arylsulphatase D (ARSD), transcript variant 1, mRNA	
3021	1246	22741	1.41	1.0E-52	5610701	NT	polymeric transmembrane homolog (retroviral element) [human, endogenous retrovirus element RTV-L-Hp1], GenBank: 650 nt	
5270	15102	24697	3.59	1.0E-52	10252851	NT	Human PMS2 related (PMR1) gene, complete cds	
5851	157	28875	2.11	1.0E-52	10386844	NT	Human adolase C gene for fructose-1,6-bisphosphate aldolase	
6394	16255	26417	3.19	1.0E-52	10712921	NT	Homo sapiens chromosome 21 segment Hs21.C027	
6822	1880	157	1.84	1.0E-52	10162372	NT	Homo sapiens chromosome 21 segment Hs21.C022	
8023	17873	1	1.61	1.0E-52	10162302	NT	Homo sapiens chromosome 21 segment Hs21.C020	
8147	18035	28283	1.84	1.0E-52	148952	NT	Homo sapiens protein tyrosine phosphatase [P-TCP(X1)(NP77-QDQX)1] mRNA, complete cds	
8219	1804	28420	2.04	1.0E-52	11428321	NT	Homo sapiens protein (prosome, macrophage) subunit, beta type 2 (PSMB2) mRNA	
3723	19636	23420	1.03	9.0E-53	4509084	NT	Homo sapiens protein kinase, GMP-dependent, regulatory, type I, beta (PRKACRB2) mRNA	
4893	14841	24811	0.93	9.0E-53	10001446	NT	Homo sapiens core binding factor subunit CBP1 gene, exon 3	
6335	19018		2.06	7.0E-53	BF228405	EST HUMAN	Homo sapiens predicted disordered protein (CS3780), mRNA	
6752	12832		2.98	7.0E-53	AU217821	EST HUMAN	Hs40.47-X1 NCI-BIOMarkers	
6839	19048	23690	2.2	5.0E-53	4758543	NT	Homo sapiens serine/threonine nucleolar (hnRNP G) (CUCe) (HNRPC) mRNA	
43	10031	10854	1.72	6.0E-53	AV8/36565	EST HUMAN	Homo sapiens chromosome 21 segment Hs21.C008	
43	10031	19835	1.92	4.0E-53	101623852	NT	Homo sapiens chromosome 21 segment Hs21.C085	
4715	14861	24387	1.09	4.0E-53	77054	EST HUMAN	Homo sapiens 1 protein (HROK1) mRNA	
8845	18417	28686	3.33	4.0E-53	BF128701	EST HUMAN	Hs01016869f1 NIN - WGC-18 Homo sapiens cDNA clone IMAGE:40598977	
2625	12993	23384	2.59	3.0E-53	AB205888	NT	Homo sapiens DLECL1 to ORCTL4 gene region, section 12 (DLECL1, ORCTL3, ORCTL4 genes, complete cds)	
3670	13894	23371	1.29	3.0E-53	AV1050838	EST HUMAN	hrc2c27-X1 Selenocysteine-Dicarboxylic acid NHCtD Home sapiens cDNA clone IMAGE:2558793	
4833	14715	24498	1.18	2.0E-53	AB030563	EST HUMAN	Homo sapiens cDNA clone IMAGE:40598978	
6833	16712	28095	0.88	3.0E-53	B009344	EST HUMAN	Q33-ET70381-2700937-005 B70381 Homo sapiens cDNA	
7238	17116	20470	0.59	3.0E-53	5001983	NT	Homo sapiens FGFR1 oncogene partner (FZD1) mRNA	
450	1094		4.25	2.0E-53	AA34086505	EST HUMAN	ES177525 Parvovirus Unstr Homo sapiens cDNA 5' end	
2279	1263	22090	2.98	2.0E-53	U782072	NT	Homo sapiens Bruton's tyrosine kinase (BTK) (BTK) mRNA, complete cds	

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 Table 4
 Single Exon Proteins Expressed in Heart

Probe Seq ID NC:	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal	Meet Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
2460	12956			10.54	2.0E-53	4502316	NT	Human sapiens ATPases, H+-transporting, lysosomal (vacuolar pump) 3/HKD; Vacuolar proton-ATPases, subunit E; VATPase, subunit E (ATPase), mRNA
2684	12566	2246		6.93	2.0E-53	4757615	NT	Human sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
2684	12566	2247		6.93	2.0E-53	4757615	NT	Human sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
3207	13131	22933		1.18	2.0E-53	Af083822.1	NT	Human sapiens dihydropyridine receptor alpha 2 subunit (CaCNa201) gene, exon 6
3970	13877	23663		2.06	2.0E-53	Wn1673.1	NT	Human Krueppel-related RNA-binding protein (KRF4) gene, partial cds
4290	14286	24068		1.07	2.0E-53	4505020	NT	Human sapiens SKA1/SKAP1 homolog (SKA1/HO1/HO4) mRNA
5091	14881	24735		1.12	2.0E-53	Al162281.2	NT	Human sapiens chromosome 21 segment HS21 C061
6091	14861	24736		1.12	2.0E-53	Al162281.2	NT	Human sapiens chromosome 21 segment HS21 C061
6331	16251	25066		3.11	2.0E-53	Bf334740.1	EST HUMAN	PMI-C70385b-708600-001+003 Ct0386/Homo sapiens cDNA
6331	16251	26057		3.11	2.0E-53	Bf334740.1	EST HUMAN	PMI-C70385b-708600-001+003 Ct0386/Homo sapiens cDNA
7443	17260			5.6	2.0E-53	AV216679.1	EST HUMAN	PMI-C70385b-708600-001+003 Ct0386/Homo sapiens cDNA clone IMAGE_28222081_5
1423	1334	21200		0.9	1.0E-53	AJ2271736.1	NT	Human sapiens pseudooxotromodulin region, segment 1/2 [DLECI, ORC1L3, ORC1L4 genes, complete cds]
3364	13283	23083		1	1.0E-53	AB028898.1	NT	Human sapiens DNA, DLECI to ORC1L4 gene region, section 1/2 [DLECI, ORC1L3, ORC1L4 genes, complete cds]
6021	16625	24056		1.42	1.0E-53	Bf361201.1	EST HUMAN	CM-AN-1N102b-160500-543-022 NN1102b/Homo sapiens cDNA
7232	17129	27322		6.14	1.0E-53	CF76586.1	NT	Human sapiens mRNA, 16S rRNA core protein T1
6152	16119	24787		0.8	5.0E-54	4601500	NT	Human sapiens T-cell lymphoma invasion and metastasis 1 (TAM1) mRNA
6244	19339	24939		0.8	5.0E-54	4505010	NT	Human sapiens T-cell lymphoma invasion and metastasis 1 (TAM1) mRNA
200	10172	19898		4.71	5.0E-54	4502708	NT	Human sapiens GTPase activating protein 7 (GAP70/GAP70) mRNA
1794	11692	21508		3.09	5.0E-54	Bf390765.1	EST HUMAN	601272633/F1-N1/MC_20/Homo sapiens cDNA clone [VA02361-031] f'
4023	14817	24307		1.26	6.0E-54	4501610	NT	Human sapiens insulin-like growth factor 2 receptor (IGF2R) mRNA
4629	14817	24308		1.25	8.0E-54	4501784	NT	Human sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
5030	14817	24307		1.08	8.0E-54	4501784	NT	Human sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
6030	14617	24506		1.08	8.0E-54	4501784	NT	Human sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
6614	15529	25612		20.61	8.0E-54	6057500	NT	Human sapiens ATP-binding cassette, subfamily A (ABC1) member 1 (ABC1) mRNA
379	10963	20186		1.26	7.0E-54	AAS12527.1	EST HUMAN	af78c12.5 Sources: best NT! Homo sapiens clone 1377046 3' similar to contains MER30 t3 MER30
1789	11687	21663		1.54	7.0E-54	Y168545.1	NT	Homo sapiens mRNA for monocile chondroitinase protein-2
2158	12045	21915		4.61	7.0E-54	N27177.1	EST HUMAN	y65d12.1 Sources: best NT! Homo sapiens clone IMAGE_267398_3' similar to contains LTR as LTR repetitive element;

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Table 4
Single Exon PIPBES Express

Single Exon Probes Expressed in Heart

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Table 4

Single Exon Proteins Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NC:	ORF SEQ ID NO:	Expression Signal Value	Meet Similar (Top) HT BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor:	
1529	11434	21260	1.6	2.0E-54	AA1056008.1	EST_HUMAN	nt07806.51 NC_000040 Homo sapiens cDNA clone IMAGE:1204600 similar to contains element L1 repetitive element;	
2403	12667	22281	1.3	2.0E-54	AL163175.1	EST_HUMAN	al0203.91 HUMAN O-3beta-fet CULIN HOMOLOC 1;	
2556	12728	22321	1.82	2.0E-54	AL165210.2	NT	Homo sapiens chromosome 21 segment (TS21C010 .	
2865	12763	22587	1.65	2.0E-54	AV075224.1	EST_HUMAN	wy0203.91 Scores: NSPF_P8W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:28552927 3' similar to TR_Ce02084_Qs2084_PHO5HOLIPASE C NEIGHBORING	
3501	13418	16209	4.06	2.0E-54	AA1032925.1	EST_HUMAN	na4508.11 NC_001002.1 Homo sapiens cDNA clone IMAGE:905-288 similar to gb:X53777 60S RIBOSOMAL PROTEIN L22 (HUMAN)	
4110	14010	14240	2.03	2.0E-54	AB052052.1	NT	Homo sapiens chaperonin containing 1-complex subunit 8 (CCP-8) mRNA	
4343	14240	14240	1.13	2.0E-54	AL163201.2	NT	SW_0203.11 HUMAN IS21C001	
4780	14684	24450	1.45	2.0E-54	AF085823.1	NT	Homo sapiens chaperonin containing 2 subunit (CCHN2) mRNA	
5136	15023	24750	0.84	2.0E-54	AF085823.1	NT	Homo sapiens dihydropyridine receptor alpha 2 subunit (CaCN2/21) gene, exon 7	
5503	15283	25116	3.75	2.0E-54	AF075009.1	NT	Homo sapiens small inducible cytokine subfamily A (C-Cyta) protein member 14 (SCYTA14) mRNA	
5540	15300	25417	1.34	2.0E-54	BE047884.1	EST_HUMAN	240c1.91 NC_001002.1 Homo sapiens cDNA clone IMAGE:2297348 5'	
65521	15439	25503	3.59	2.0E-54	AB047885.1	EST_HUMAN	Homo sapiens mRNA for KIAA1561 gene product (KIAA1561 protein), partial cds	
6573	15468	25554	18.10	2.0E-54	ABD048811.1	NT	Homo sapiens mRNA for KIAA1561 protein, partial cds	
5573	15468	25565	18.19	2.0E-54	ABD048911.1	NT	Homo sapiens mRNA for KIAA1561 protein, partial cds	
6227	16093	26243	8.14	2.0E-54	AB0478554.1	NT	Homo sapiens mRNA for brain tyrosine receptor, complete cds	
7749	17403	27617	3.62	2.0E-54	ABD01025.1	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2) mRNA	
7752	17403	27621	1.26	2.0E-54	11426554.1	NT	Homo sapiens plectocilia zebrafish (homolog 1 containing BRCT domain (PEST1)) mRNA	
8063	18770	17599	2.57	2.0E-54	7885745.1	NT	Homo sapiens protein (Dioophidium) homolog 3 (FEZ3) mRNA	
9653	19244	28216	1.46	2.0E-54	85957367.1	NT	6018902309.1 NIH 3T3	
4393	14259		1.07	1.0E-54	BF1315418.1	EST_HUMAN	U077341 Sugano cDNA library Homo sapiens cDNA clone Zn+6C280 similar to 5'-end region of Human gamma-globulin transpeptidase mRNA, 5 end	
9852	19345		2.26	1.0E-54	AU077341.1	EST_HUMAN	Homo sapiens REB50 gene for RING finger protein yf26d4.1 Scores: NSPF_P8W_OT_PA_P_S1	
1204	11201		14.58	8.0E-55	Y07859.2	NT	Homo sapiens REB50 gene for RING finger protein	
1297	11204		2.32	8.0E-55	Y07859.2	NT	fl0203.91 NIH 3T3	
8550	18402		2.76	8.0E-55	AV049774.1	EST_HUMAN	fl0203.91 NIH 3T3	
1065	10981	20826	1.19	7.0E-56	R0346.1	EST_HUMAN	yf26d4.1 Scores: NSPF_P8W_OT_PA_P_S1	
7297	17773	27373	1.28	7.0E-56	AA88581.1	EST_HUMAN	SP-C581 BOVIN P03697 CYTOCHROME b	
7315	17191	27383	1.59	7.0E-56	AA119898.1	EST_HUMAN	428a11.1 Scores: NSPF_P8W_OT_PA_P_S1	
					AU136909	EST_HUMAN	PLAC11 Homo sapiens cDNA clone PLACE:1011576 5'	

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Single Exon Probes Expressed in Heart

Probe Seq ID No.:	Exon Seq ID No.:	ORF Seq ID No.:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8541	18413	28579	12.75	7.0E-35	AI951056.1	EST_HUMAN	hs290t09-x1 NOT CGCAP_UH Homo sapiens cDNA clone IMAGE:2210249-3'
8541	18413	28550	12.75	7.0E-35	AI951056.1	EST_HUMAN	hs290t09-x1 NOT CGCAP_UH Homo sapiens cDNA clone IMAGE:2210249-3'
9823	19848		4.3	7.0E-35	AI951056.1	EST_HUMAN	hs290t07-x1 Scores in brain from 111S Homo sapiens cDNA clone IMAGE:2210244-5'
8803	18617	28926	1.98	6.0E-35	AB009241.1	NT_HUMAN	Homo sapiens mRNA for KIAA501 protein, partial cds
1732	11633	21500	1.12	6.0E-35	AA704971.1	EST_HUMAN	hs290t09-x1 Scores: total liver, spleen, [NPLS, ST] Homo sapiens cDNA clone IMAGE:4826173
1732	11633	21501	1.12	6.0E-35	AA704971.1	EST_HUMAN	hs290t09-x1 Scores: total liver, spleen, [NPLS, ST] Homo sapiens cDNA clone IMAGE:4826173
5941	15846	25869	1.82	6.0E-35	4502240	NT	Homo sapiens antisense RNA containing E chondrocytoma punctata 1 (ARE1) mRNA
6941	15846	25970	1.82	6.0E-35	4502240	NT	Homo sapiens antisense RNA containing E chondrocytoma punctata 1 (ARE1) mRNA
7770	17036	27286	2.06	6.0E-35	4502502	NT	Homo sapiens mRNA for KIAA0511 protein, recessive type 4, slip in poly peptide (PPR0) mRNA
7770	17620	27851	1.96	5.0E-35	AB014511.1	NT	Homo sapiens mRNA for KIAA0511 protein, partial cds
7770	17620	27852	1.96	5.0E-35	AB014511.1	NT	Homo sapiens mRNA for KIAA0511 protein, partial cds
7869	17719	27965	1.19	6.0E-35	5453705	NT	Homo sapiens mRNA for (chd1-like 2 (NEL2)) mRNA
9223	18985		2.13	6.0E-35	11417912	NT	Homo sapiens neuropeptide zebrafish homo101 containing BRO1 domain (PEST1) mRNA
49	12653	19843	1.36	4.0E-35	AV957794.1	EST_HUMAN	ES3717054-MACE binding motif protein, Y chromosome, family 1, member A1 (RMNYA1) mRNA
6868	12691	20409	33.96	4.0E-35	4526073	NT	Homo sapiens mRNA binding motif protein, Y chromosome, family 1, member A1 (RMNYA1) mRNA
1422	11228	21163	1.89	4.0E-35	7967713	NT	Homo sapiens predicted conserved protein (GS37986) mRNA
1422	11228	21164	1.89	4.0E-35	7967713	NT	Homo sapiens predicted conserved protein (GS37986) mRNA
1469	11402		1.26	4.0E-35	BP001411.1	EST_HUMAN	7012010-x1 Scores: NSF_FG_FG_WT_PNP_F_51 Homo sapiens cDNA clone IMAGE:3590043 similar to L1 L1 repetitive element
1979	11872	21763	1.53	4.0E-35	4505180	NT	Homo sapiens proteasome (prosome, macrophain) subunit, alpha/beta type, 2 (PSM1A2) mRNA
1979	11872	21764	1.53	4.0E-35	4505190	NT	Homo sapiens proteasome (prosome, macrophain) subunit, alpha/beta type, 2 (PSM1A2) mRNA
2059	11930	21824	7.73	4.0E-35	4505314	NT	Homo sapiens diacylglycerol kinase, gamma (DGK γ) (DGKG) mRNA
2262	12460	22046	7.73	4.0E-35	4505314	NT	Homo sapiens diacylglycerol kinase, gamma (DGK γ) (DGKG) mRNA
2262	12460	22046	1.25	4.0E-35	4505794	NT	Homo sapiens diacylglycerol kinase, gamma (DGK γ) (DGKG) mRNA
2545	12419		1.04	4.0E-35	AJ271735.1	NT	Homo sapiens Xba pseudooxotomia 1 (pxo) region, segment 1/2
3242	13165	22984	1.38	4.0E-35	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
6837	16738		0.44	4.0E-35	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C100
6559	18429		4.46	4.0E-35	W28196.1	EST_HUMAN	42-5 Human retina cDNA randomly primed library Homo sapiens cDNA
6220	18953		2.36	4.0E-35	BP305941.1	EST_HUMAN	6678585-35-NP305941-NP305941-17 Human retina cDNA clone IMAGE:4126356-5'
9138	18954		2.76	3.0E-35	BE170519.1	EST_HUMAN	FMT+TT0063-08090-001-508 HT0803 Homo sapiens cDNA
9896	19156		1.95	3.0E-35	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C100
373	10327	20150	2.3	2.0E-35	X571747.1	NT	Human endogenous retrovirus pHE-4-1, complete retroviral segment
6559	19490		0.89	2.0E-35	MM09787.1	NT	Human endogenous retrovirus DNA 4-1, complete retroviral segment
6559	10570	20183	3.06	2.0E-35	4501728	NT	[protein]-binding protein 1 (S72BP1) mRNA, anti-translated products

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 Single Exon Probes Expressed in Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2928	12855	22656	0.79	2.0E-35	4S07798	NT	Home sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UE84) mRNA
4695	14451	24942	2.97	2.0E-35	BE719886.1	EST_HUMAN	GMI-1 (T0876-150300C-357-025) HT08/6 Homo sapiens cDNA
7284	17160	4.3	2.0E-35	A0003806.1	EST_HUMAN	amphibian & Strategic alliance brain S111 Homo sapiens cDNA clone IMAGE:10841985 similar to contains THRB2 regulatory element	
8319	18196	28446	2.2	2.0E-35	AU116244.1	EST_HUMAN	AU118344 (HEMBA) 1 Homo sapiens cDNA clone IMAGE:005985 &
91	10976	19891	1.6	1.0E-35	4G05000	NT	Home sapiens mannan-6-phosphate receptor (cation dependent) (M6PR) mRNA
182	10154	16969	11.0	1.0E-35	UG0923.1	NT	Oryzobius caraboides New Zealand white elongation factor 1 alpha (7/14-11E, a HMG class 3 molecule [methyl h subdomain]ability complex)
1132	11046	20988	3.55	1.0E-35	AB202701.0	NT	Home sapiens mRNA for KIAA0633 protein, partial cds
1907	11802	21680	0.86	1.0E-35	BB2277891.1	EST_HUMAN	BB0112016F1 NIH 3T3C mRNA clone IMAGE:2507027 &
1907	11802	21681	0.86	1.0E-35	BB2277891.1	EST_HUMAN	BB0112016F1 NIH 3T3C mRNA clone IMAGE:2507027 &
2227	12161	12651	2.3	1.0E-35	BB013714	NT	Home sapiens SMA3 (SMAS) mRNA
2230	12651	22071	1.03	1.0E-35	AF000590.1	NT	Home sapiens telomere-specific Telomerase Transporter Y (TTY1) mRNA, partial cds
2470	12346	22239	33.19	1.0E-35	XJ131111	NT	Human mRNA for TSHZ4-11E, a HMG class 3 molecule [methyl h subdomain]ability complex
2507	12881	22271	4.71	1.0E-35	AB007098.2	NT	Home sapiens mRNA for KIAA0636 protein, partial cds
2507	12881	22272	4.71	1.0E-35	AB007090.2	NT	Home sapiens mRNA for KIAA0636 protein, partial cds
2509	12459	22331	1.35	1.0E-35	BB01057.1	NT	Home sapiens C1P mRNA, partial cds
3093	13282	23082	1.16	1.0E-35	W25189.	EST_HUMAN	43-5 Human retina cDNA randomly primed arbitrary Homo sapiens cDNA
3907	13817	23897	3.47	1.0E-35	AL1652327.2	NT	Home sapiens chromosome 21 segment 21 segment f521c067
4197	14007	23878	1.04	1.0E-35	AL1652310.2	NT	Home sapiens DSCRB mRNA, complete cds
4721	14007	24802	0.98	1.0E-35	AL1652316.1	NT	Home sapiens DSCRB mRNA, complete cds
4721	14007	24893	0.98	1.0E-35	AB097103.1	NT	Home sapiens hypothetical protein FLJ20129 (FLJ20129), mRNA
5031	14881	24727	1.19	1.0E-35	BB02125	NT	Home sapiens heat domain and RLD 2 (HERC2), mRNA
5704	15700	25809	5.75	1.0E-35	11430346	NT	Home sapiens heat domain and RLD 2 (HERC2), mRNA
5704	15700	25810	5.75	1.0E-35	11430346	NT	Home sapiens heat domain and RLD 2 (HERC2), mRNA
8234	19163	28405	4.74	1.0E-35	AL1652310.2	NT	Home sapiens chromosome 21 segment f521c010
8234	19163	28406	4.74	1.0E-35	AL1652310.2	NT	Home sapiens chromosome 21 segment f521c010
8745	17994	28135	2.38	1.0E-35	US058051	NT	Human West Nile virus unknown product mRNA, complete cds
8799	18971	28656	2.04	1.0E-35	05567821	NT	Home sapiens DNA-binding protein (LOC005242), mRNA
6339	16221	26583	1.81	9.0E-36	BB319074.1	EST_HUMAN	BB01237702F1 NIH 3T3C mRNA clone IMAGE:3009652 &
2703	15307	22457	5.18	7.0E-36	H19834.1	EST_HUMAN	BB012303.1 Sigma adult brain N2a56HB57/Homo sapiens cDNA clone IMAGE:1730445 similar to contains TLR repetitive element;
6504	16953	26539	1.94	7.0E-36	AW361213.1	EST_HUMAN	RC1-C1 (T0262-23109-013-007 CT0262) Homo sapiens cDNA

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Probe Seq ID No.	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6804 16963	29559	1.84	7.0E-56	AV367712.1	EST_HUMAN	RCT-C70252-231069-013-807 CT0252 Homo sapiens cDNA	
1666 11658	21454	2.26	5.0E-56	AV367712.1	EST_HUMAN	RC3-BN0053-70200-011-101 BN0053 Homo sapiens cDNA	
7940 17750		1.31	5.0E-56	HE60861	EST_HUMAN	4251 Human retina cDNA randomly primed library/Homo sapiens cDNA	
6376 19701	24922	2.68	6.0E-56	HE60861	EST_HUMAN	CH-22038 Chromosome 22, exon Homo sapiens cDNA clone C22-85' 5'	
25 10012	19805	6.15	4.0E-56	AF147349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds	
25 10012	18906	6.15	4.0E-56	AF147349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds	
2876 12641	22431	4.11	4.0E-56	4507728	NT	Homo sapiens tubulin, beta polypeptide (TUB) mRNA	
2876 12541	22432	4.11	4.0E-56	4807728	NT	Homo sapiens tubulin, beta polypeptide (TUB) mRNA	
2781 10457	21268	3.05	4.0E-56	AF005328.1	NT	Homo sapiens X-linked anteriorized bone marrow protein BM031 mRNA, complete cds	
6788 15894	28602	6.29	4.0E-56	AF2177608.1	NT	Homo sapiens uncharacterized bone marrow protein BM031 mRNA, complete cds	
6788 15894	28603	6.29	4.0E-56	AF2177608.1	NT	Homo sapiens lymphocyte-specific protein 1(LSP1) gene, SP-7 allele, partial cds	
7650 17849	28600	1.23	4.0E-56	AF043346.1	EST_HUMAN	Im862.1/ NCI CGAP Enriched Homo sapiens cDNA clone IM862.1/ NCI CGAP	
8235 18774	28447	8.75	4.0E-56	AF580065.1	EST_HUMAN	Im862.1/x NCI CGAP Brn25: Homo sapiens cDNA clone IM862.1/x NCI CGAP	
8285 18774	28448	8.75	4.0E-56	AF580065.1	EST_HUMAN	Im862.1/x NCI CGAP Brn25: Homo sapiens cDNA clone IM862.1/x NCI CGAP	
1318 11225	21051	6.85	3.0E-56	8802029	NT	Homo sapiens oncogene TC21 (TC21), mRNA	
2103 11692	21612	2.7	3.0E-56	6612607	NT	Homo sapiens cDNA clone M3	
3088 13013	22604	1.58	3.0E-56	AJ328626.1	EST_HUMAN	Homo sapiens DNA 5' end	
3088 13013	22605	1.58	3.0E-56	AJ328626.1	EST_HUMAN	EST-78859 Carbillin II/Homo sapiens cDNA 5' end	
3791 13674		1.39	3.0E-56	A056056.1	NT	Homo sapiens M/C cluster 1 region	
4327 14224	24006	4.05	3.0E-56	AL05298.2	NT	Homo sapiens chromosome 21 segment HS21C008	
4470 14264	24114	2.14	3.0E-56	5002085	NT	Homo sapiens superfamily minicidin activity 2 (S. cerevisiae homeo)-like (SK1/V2), mRNA	
5496 15405	24407	1.57	3.0E-56	4779103	NT	Homo sapiens sparcodermin, cwcv and kazo-like domains proteolytic can (testican) (SPOCK) mRNA	
5488 15405	25468	1.57	3.0E-56	4779163	NT	Homo sapiens sparcodermin, cwcv and kazo-like domains proteolytic can (testican) (SPOCK) mRNA	
6106 16003	26141	6.34	3.0E-56	1142124	NT	Homo sapiens bone morphogenic protein 2 (BMP2), mRNA	
7117 16994	27195	5.74	3.0E-56	11419704	NT	Homo sapiens klotho gene product (Klotho), mRNA	
7957 17937	28078	1.52	3.0E-56	1145296	NT	Homo sapiens KIF4B-7 gene product (KIF4C7), mRNA	
8124 18012	28266	10.72	3.0E-56	AB042586.1	NT	C-mos mRNA, similar to rat myomelan, complete cds	
8632 18497	28771	3.89	3.0E-56	5902013	NT	Homo sapiens nuclear pore complex interacting protein (NIPP), mRNA	
8632 18497	28772	3.89	3.0E-56	5902013	NT	Homo sapiens nuclear pore complex interacting protein (NIPP), mRNA	
9240 18695	25315	2.3	3.0E-56	1143876	NT	Homo sapiens cavinlin 3 (CAV3), mRNA	
9240 18695	25316	2.3	3.0E-56	1143876	NT	Homo sapiens cavinlin 3 (CAV3), mRNA	

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Probe Seq ID No.: NC_	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST T E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
613	10455	20476	2.94	2.0E-56	AA1598818.1	EST_HUMAN	2p20.8, st Strategianeurocytoblastum (897723) Homo sapiens cDNA clone MAGE-0445206 3'
716	12976	12976	1.19	2.0E-56	BT0643865.1	EST_HUMAN	RC4-BT0310-103000-016-10 BT0310 Homo sapiens cDNA
724	12875	22477	1.19	2.0E-56	BT0643865.1	EST_HUMAN	Human cGMP phosphodiesterase sigma subunit (CGPR-A) mRNA, complete cds
2234	12215	22113	1.02	2.0E-56	MA9061.1	NT	Human cGMP phosphodiesterase sigma subunit (CGPR-A) mRNA, complete cds
2234	12215	22114	1.02	2.0E-56	MA9061.1	NT	Human cGMP phosphodiesterase sigma subunit (CGPR-A) mRNA, complete cds
2659	14886	22884	0.93	2.0E-56	AB037835.1	NT	Homo sapiens protein for KIAA1414 protein, partial cds
3489	13405	22210	1.08	2.0E-56	AY703184.1	EST_HUMAN	AV703184 ADB Homo sapiens cDNA clone ADBG-F10 5'
604	10887	10887	1.44	1.0E-56	AF090301.1	EST_HUMAN	Meatless fasciculin protein tyrosine phosphatase (PLR1) mRNA, complete cds
3622	13320	22321	1.79	1.0E-56	AF190385.1	EST_HUMAN	NC_002141 NC_002141 Homo sapiens cDNA clone MAGE-294463 3'
3622	13326	23322	1.79	1.0E-56	AV569493.1	EST_HUMAN	NC_002141.X1 NC_002141 Homo sapiens cDNA clone MAGE-294463 3'
4963	14638	24606	1.52	1.0E-56	AI005102.1	EST_HUMAN	RC0-670168-229969-001-E02 CT0168 Homo sapiens cDNA
7780	17830	27863	1.86	1.0E-56	AV845987.1	EST_HUMAN	Q9VQ010039-070300-152-2603 T00335 Homo sapiens cDNA
609	10545	10545	1.97	9.0E-57	AV850085.1	EST_HUMAN	Hom sapiens EgrNA1 (EPHA4) mRNA
4109	14009	20786	1.17	9.0E-57	4752279	NT	Hom sapiens EgrNA1 (EPHA4) mRNA
4109	14009	23767	1.17	9.0E-57	4752279	NT	Hom sapiens EgrNA1 (EPHA4) mRNA
13	9959	19700	1.55	8.0E-57	8023249	NT	Hom sapiens hypothetical protein FLJ23071, mRNA
264	10268	20070	2.91	8.0E-57	AV706405.1	EST_HUMAN	Q9V-S07234-181169-037-06 S110234 Homo sapiens cDNA
806	10792	20842	5.79	8.0E-57	AV706405.1	EST_HUMAN	kd610.11 NC_002141 Homo sapiens cDNA clone MAGE-2759251 3' similar to gB-U05875
1774	11673	21681	1.63	8.0E-57	AA495109.1	EST_HUMAN	INTERFERON-GAMMA RECEPTOR BETA CHAIN PRECURSOR (HUMAN),
3335	13255	23060	1.02	8.0E-57	4752279	NT	Z651612.11 Scores, Basis: NT Homo sapiens cDNA clone MAGE-67151 5'
3335	13255	23061	1.02	8.0E-57	4752279	NT	Hom sapiens EgrNA1 (EPHA4) mRNA
6107	14675	24750	0.98	8.0E-57	AA071001.1	EST_HUMAN	Q967h02.61 Scores, Basis: NT Homo sapiens cDNA clone MAGE-15516103 3'
5207	19224	25504	0.35	8.0E-57	AA021317.1	NT	Hom sapiens scatholein 2, mitochondrial (ACO2), mRNA
6858	16794	25615	11.76	8.0E-57	AA021317.1	NT	Hom sapiens mRNA for KIAA0800 protein, partial cds
5888	15794	25816	11.76	8.0E-57	AA020844.1	NT	Hom sapiens mRNA for KIAA0837 protein, partial cds
6557	16415	25865	67.76	8.0E-57	AA020844.1	NT	Hom sapiens mRNA for KIAA0837 protein, partial cds
8771	9959	19700	3.32	8.0E-57	8023249	NT	Hom sapiens hypothetical protein FLJ23071 (FLJ23071), mRNA
9468	19097	19097	1.27	8.0E-57	7015625	NT	Hom sapiens monocarboxylate transporter 3 (SLC16A8), mRNA
9822	19188	22851	2.02	8.0E-57	1154572	NT	Hom sapiens S3-domain binding protein 1 (SH3BP1), mRNA
2562	12462	22353	2.02	7.0E-57	7051562	NT	Hom sapiens arm GDS-ASSOCIATED PROTEIN (SNAP), mRNA
2562	12462	23454	2.02	7.0E-57	765752	NT	Hom sapiens arm GDS-ASSOCIATED PROTEIN (SNAP), mRNA

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Single Exon Probes Express

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Probe Seq ID No.	Exon Seq ID NC:	ORF Seq ID No:	Expression Signal	Most Similar (Top) HU BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5478	15086			1.43	2.0E-57	A/016131.1	EST_HUMAN 780604_X1 NCI_CGAP_Ov18_Homo sapiens cDNA clone IMAGE:36709165 3' similar to contains L1_13_1
5576	15055			26.14	2.0E-57	B/015296.1	EST_HUMAN MEP22 repetitive element;
7017	16894	27084	1.29	2.0E-57	A/056462.1	EST_HUMAN NT	
7865	17815	27742	1.71	2.0E-57	B/057722.1	EST_HUMAN Homo sapiens T-cell hydroxylated regulatory protein p44 mRNA, complete cds	
8592	18460	28729	2.22	2.0E-57	B/054084.1	EST_HUMAN Homo sapiens hydrophilic protein FLJ20341 (FLJ_20341), mRNA	
8592	18460	28730	2.22	2.0E-57	B/054084	EST_HUMAN Homo sapiens hydrophilic protein FLJ20341 (FLJ_20341), mRNA	
2154	12071	21973	1.12	1.0E-57	A/053206.1	EST_HUMAN HU/H-BN0169-02-A-U1 NIH_MGC_50_Homo sapiens cDNA clone IMAGE:30785485	
7046	16922		2.08	1.0E-57	B/049303.1	EST_HUMAN 782608_X1 NCI_CGAP_L024_Homo sapiens cDNA clone IMAGE:3039062 3' similar to TRC00246_O01248	
8401	19055			3.47	1.0E-57	A/047094.1	EST_HUMAN HU/H-BN0169-02-A-U1 NIH_MGC_44_Homo sapiens cDNA clone IMAGE:2875499 3' similar to TRC015476_O15476
9553	19223	26239	1.43	0.0E-58	B/036506.1	EST_HUMAN HU/H-BN0169-02-A-U1 NIH_MGC_68_Homo sapiens cDNA clone IMAGE:35822115	
574	10512		1.41	1.0E-58	B/068715.1	EST_HUMAN HU/H-BN0169-02-A-U1 NIH_MGC_68_Homo sapiens cDNA clone IMAGE:35822115	
658	10576	20389	2.62	8.0E-58	A/070376.1	EST_HUMAN UNNAMED_HERV4-H-PROTEIN	
538	10375	20390	2.62	8.0E-58	A/070378.1	EST_HUMAN UNNAMED_HERV4-H-PROTEIN	
1813	11710	21589	2.23	8.0E-58	A/070381.1	EST_HUMAN Homo sapiens putative protein C-nitroaminoacid reductase (POMT2), mRNA	
1813	11710	21589	2.23	8.0E-58	A/070381	EST_HUMAN Homo sapiens putative protein C-nitroaminoacid reductase (POMT2), mRNA	
2945	12872		2.83	8.0E-58	A/070382	EST_HUMAN Homo sapiens putative protein C-nitroaminoacid reductase (POMT2), mRNA	
8221	18112		5.61	7.0E-58	A/070382	EST_HUMAN Homo sapiens MADS box transcription enhancer factor 2, polyepoxide B (mycocyte enhancer factor 2B)	
8310	18179	28425	3.25	7.0E-58	A/054106.1	EST_HUMAN HU/H-BN0169-01-0-0-U1 NIH_MGC_50_Homo sapiens cDNA clone IMAGE:307867_5'	
8301	18179	28426	3.25	7.0E-58	A/054106.1	EST_HUMAN HU/H-BN0169-01-0-0-U1 NIH_MGC_50_Homo sapiens cDNA clone IMAGE:307867_5'	
2207	12094	21997	0.9	0.0E-58	B/2650191.1	EST_HUMAN 6013034655_F1 NIH_MGC_44_Homo sapiens cDNA clone IMAGE:651000_5'	
2234	12095	22105	2.95	0.0E-58	A/115068681	EST_HUMAN AU306969_N12R3907265	
2871	12798	22592	1.19	8.0E-58	B/242150.1	EST_HUMAN TA/AAPE1219_friedreich acute myelogenous leukemia cell (FAS_M) Bayes-HGSC project/TCA_Homo	
2871	12798	22593	1.19	8.0E-58	B/242150.1	EST_HUMAN TA/AAPE1219_friedreich acute myelogenous leukemia cell (FAS_M) Bayes-HGSC project/TCA_Homo	
7039	17756	28900	1.3	8.0E-58	A/11434746	EST_HUMAN Homo sapiens protein tyrosine phosphatases, non-receptor type 21 (PTPN21), mRNA	
9482	19109		1.8	8.0E-58	A/11622921	EST_HUMAN Homo sapiens hydrophilic protein FLJ20345 (FLJ_20345), mRNA	

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Probe Seq ID No:	Exn Seq ID NC:	ORF Seq ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
207	10261	20081	2.9	5.0E-38	4507534	Hom sapiens synaptobatin 1 (SYNA1), mRNA	ICSA-NT0057-150000-0016-005 N10057 Homo sapiens cDNA CMR-LM0045-2403005-127-467 UM0045-2403005-127-467
553	10256	20451	5.87	5.0E-38	BET76598A.1	EST HUMAN	ICSA-NT0057-150000-0016-005 N10057 Homo sapiens cDNA CMR-LM0045-2403005-127-467 UM0045-2403005-127-467
1173	11098	20932	4.47	6.0E-38	AV797946.1	EST HUMAN	CMR-LM0045-2403005-127-467 UM0045-2403005-127-467
1176	11098	20933	4.47	6.0E-38	AV797946.1	EST HUMAN	CMR-LM0045-2403005-127-467 UM0045-2403005-127-467
1177	11098	20932	2.99	5.0E-38	AV797946.1	EST HUMAN	CMR-LM0045-2403005-127-467 UM0045-2403005-127-467
1177	11098	20933	2.99	5.0E-38	AV797946.1	EST HUMAN	CMR-LM0045-2403005-127-467 UM0045-2403005-127-467
3261	13202	23902	3.56	5.0E-38	AA788783.1	EST HUMAN	orff007_51 NC1 CGAT CGAT Lys Homo sapiens cDNA clone IMAGE-1003908.3' Homo sapiens placenta-specific 1 (PLAC1), mRNA
3498	15978	221	6.0E-38	11494922	NT	Hom sapiens placenta-specific 1 (PLAC1), mRNA	Ym1107_f1S Scaires infant brain NT Hom sapiens cDNA clone IMAGE-230717_E
5748	16956	25704	5.86	5.0E-38	FJ20727.1	EST HUMAN	Hom sapiens apolipoprotein. Xeropatric leucine (APOL), mRNA
5894	15800	25924	1.46	5.0E-38	1142130	NT	Hom sapiens hypothalamic protein FLJ10826 (FLJ10826), mRNA
6847	16827	26721	0.77	5.0E-38	8922693	NT	Hom sapiens chromosome 21 segment 15S21Cn18
7259	17678	27923	1.56	5.0E-38	AL1932018.2	NT	Hom sapiens cell cycle syndrome chromosome Region candidate 1 (CECR1), mRNA
9215	19850	7265	3.26	5.0E-38	11526293	NT	Hom sapiens Ren (GTP-ase activating protein (NAGAP), mRNA
9878	19852	7267	2.49	5.0E-38	11418177	NT	Hom sapiens ATP synthase, H ₊ -translocating, mitochondrial F1 complex, O subunit (cytogenom sensitivity conferring protein) (ATP0), mRNA
369	10326	20147	17.97	4.0E-38	4502302	NT	Hom sapiens interleukin 1 receptor beta (IL1RB), mRNA
719	10798	20549	1.58	4.0E-38	4504934	NT	Hom sapiens cathepsin factor X (plasmin thrombolysatic component, Christmas disease, hemophilia B)
1432	11857	21221	1.24	4.0E-38	4503648	NT	Flu mRNA
2531	12405	22297	0.97	4.0E-38	AF265555.1	NT	Hom sapiens ubiquitin-conjugating B1c-E1ornan enzyme APOLON, mRNA, complete cds
2690	12461	22351	2.7	4.0E-38	U02625.1	NT	Human beta-prime-endorphin (BAM22) gene, exon 3
3283	12204	23504	1.1	4.0E-38	D10470.1	NT	Human mRNA, Xa terminal portion
3680	13594	23390	2.11	4.0E-38	5331690	NT	Hom sapiens EGf-like repetitive endocrin protein 3 (EDL3), mRNA
86651	18615	28708	7.54	4.0E-38	11424590	NT	Hom sapiens ET-15-50/KA-associated protein 1 (ET-15-50P), mRNA
332	10291	1.17	3.0E-38	R176787.1	EST HUMAN	YD1602.17 Scarcos infant brain NT1b Homo sapiens cDNA clone IMAGE-31663.5	
1397	11273	21120	2.24	3.0E-38	4758981	EST HUMAN	Hom sapiens peptide YY (PPY), mRNA
3141	13096	22894	2.81	3.0E-38	51760849.1	EST HUMAN	002185786F1 NIH MOG-45 Homo sapiens cDNA clone IMAGE-3209643.5'
3141	13096	22895	2.01	3.0E-38	51760848.1	EST HUMAN	002185786F1 NIH MOG-45 Homo sapiens cDNA clone IMAGE-3209643.6'
6002	15007	26031	1.39	3.0E-38	AV712977.1	EST HUMAN	YD17267 DCA Homo sapiens cDNA clone DCA-24034.5
925	10890	20908	8.16	2.0E-38	AIV088624.1	NT	Hom sapiens 5'-aminoimidazole ribotide synthase 2 (ALAS2) gene, complete cds homolog YD1602.21 NIH MOG-45 Homo sapiens cDNA clone IMAGE-322733.5' similar to g205931 GO5 RIBOGENOMAL PROTEIN 1(L6 (HUMAN), g2081987 Mammulus mRNA for TAKX responsive element binding protein (MOUSE).
1298	11175		12.06	2.0E-38	B6208532.1	EST HUMAN	g014868861-1 NIH MOG-70 Homo sapiens cDNA clone IMAGE-390191.5
5288	19441	24863	4.42	2.0E-38	BE907186.1	EST HUMAN	g014868861-1 NIH MOG-70 Homo sapiens cDNA clone IMAGE-390191.5

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Probe Seq ID NC:	Exon Seq ID NC:	ORF-SEQ ID No:	Expression Signal	Most Similar (Top) HT BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6288 19441	25010	4.42	2.0E-98	BE507166.1	EST_HUMAN	601468681 F1 NIH_3T3C_70 Homo sapiens cDNA clone IMAGE:15989743 similar to WIPZK5285.1	
6721 16268	25731	1.74	2.0E-98	AH724874.1	EST_HUMAN	CE16055 UBIQUITYL CONJUGATING ENZYME1 RECOVERIN SLURFAMILY OF EF-HAND CALCIUM BINDING PROTEIN;	
6249 16112	28263	2.76	2.0E-98	AF348598.1	NT	Homo sapiens endocrine receptor EndoR (Endo-180) mRNA, complete cds	
6246 16112	28234	2.76	2.0E-98	AJ348588.1	NT	Homo sapiens endocrine receptor EndoR (Endo-180) mRNA, complete cds	
8123 18011	28268	10.79	2.0E-98	BF307745.1	EST_HUMAN	601459051 F2R1 NIH_3T3C_17 Homo sapiens cDNA clone IMAGE:1518891.5	
8332 18209	28459	2.26	2.0E-98	AV672944.1	EST_HUMAN	bfm2608_x1 NC1 CGAP_Thy1 Homo sapiens cDNA clone IMAGE:3013071.3	
705 20465	210465	0.93	1.0E-98	Y056154.1	NT	Homo sapiens complement component C5b mRNA, 3' end	
1052 10669	208111	5.45	1.0E-98	6274546	NT	Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9 (22D, B22), (NDUFB9), mRNA	
1305 11212	210467	2.17	1.0E-98	AV672952.1	EST_HUMAN	ES17362622 MAGE1 sequences, MAGD1 Homo sapiens cDNA EST_34962622 MAGE1 sequences, MAGD1 Homo sapiens cDNA	
1375 11261	210468	2.17	1.0E-98	AV672952.1	EST_HUMAN	EST_34962622 MAGE1 sequences, MAGD1 Homo sapiens cDNA	
1375 11261	2135	1.07	1.0E-98	AJ253005.1	NT	Homo sapiens parvlet-A/F-1 gene, exons 2b - and Alu repeat elements	
1841 15456	21406	2.02	1.0E-98	BE495132.1	EST_HUMAN	hy0106_x1 NC1 CGAP_G63 Homo sapiens cDNA clone IMAGE:3195853.3	
2771 12633	225257	0.96	1.0E-98	47596160	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (verican) (CSPG2) mRNA	
3463 13409	222151	0.96	1.0E-98	47596161	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (verican) (CSPG2) mRNA	
3463 13409	222161	0.98	1.0E-98	47596161	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (verican) (CSPG2) mRNA	
3859 13573	23380	0.34	1.0E-98	45076268	NT	Homo sapiens translin binding protein 1 (during histone H3 replacement) (TNP1) mRNA	
4527 14816	24596	0.89	1.0E-98	NSB6953.1	EST_HUMAN	Human prothrombin converting enzyme (NEC2) gene, exon 4	
4885 14776	24589	4.95	1.0E-98	AH141063.1	EST_HUMAN	ocat5h1_x1 Scores, Nt-hMPU_S1 Homo sapiens cDNA clone IMAGE:1978129.3	
7146 17023	22217	6.7	1.0E-98	45053141	NT	Homo sapiens myosin (Myo5) 2 (115kD) (MYO52) mRNA	
8955 15700	213215	3.46	1.0E-98	X03522.1	NT	H. sapiens immunoglobulin heavy light chain variable region L44	
2182 12069	21971	2.47	1.0E-98	4507378	NT	Homo sapiens TAF1 box binding protein (TBP) mRNA	
6759 16638	288326	1.2	6.0E-99	AJ761963.1	EST_HUMAN	whb6005_x1 NC1 CGAP_Kai11 Homo sapiens cDNA clone IMAGE:23854171.3	
171 12605	13675	1.93	6.0E-99	BF205327.1	EST_HUMAN	601458551 F1 NIH_3T3C_65 Homo sapiens cDNA clone IMAGE:38620985.5	
3098 13015	22807	6.21	6.0E-99	AN07484.1	EST_HUMAN	wf4dc11_x1 Scores, NfL_T_GBC_S11 Homo sapiens cDNA clone IMAGE:23488536.3	
4559 14451	24237	5.85	6.0E-99	X054607.1	NT	H. sapiens DNA for 2NPF-linked FEN1 for terminal repeat element TAF1	
6173 16130	24850	7.46	6.0E-99	AV1620204.1	EST_HUMAN	sdub607_x1 Schmidelin total brain 000104 Homo sapiens cDNA clone IMAGE:2781228.3 similar to contains	
7566 17447	27662	1.71	5.0E-99	AV72699.1	EST_HUMAN	TAF1 box binding protein (TBP) mRNA	
6278 18558	28390	2.8	5.0E-99	11434008	NT	AN702985 MDS_765 Homo sapiens cDNA clone IMAGE:15989743	
776 10706	20546	2.42	4.0E-99	SD00006.1	NT	Homo sapiens hypothetical protein (LOC571743) mRNA	
4865 14571	24380	1.2	4.0E-99	4505735	NT	Homo sapiens gamma-endorphin receptor 3 (R1R3) mRNA	

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Probe SEQ ID NO:	Exon SEQ ID NC:	ORF SEQ ID NC:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	Homo sapiens tyrosine receptor 3 (TYRO3) mRNA
4055	14571	24569	1.2	4.0E-50	4505758	NT		Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, promoter region and exon 1
9346	19868		2.16	4.0E-49	A067720.1	NT		Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, promoter region and exon 1
0	9695		6.96	3.0E-50	AV095524.1	EST_HUMAN	EST3176821 Mage-like sequences, MAGE Homeo proteins cDNA	
221	{0 191}	20002	4.12	3.0E-50	70502247	NT		Homo sapiens KIAA0560 gene product (KIAA0560) mRNA
1682	11845	21455	9.87	3.0E-50	45058605	NT		Homo sapiens plasmalogens activator, tissue (PLA2TA) mRNA
1682	11844	21456	9.87	3.0E-50	45058606	NT		Homo sapiens plasmalogens activator, tissue (PLA2TA) mRNA
2032	11972	21866	7.68	3.0E-50	A0520905.1	NT		Homo sapiens mRNA for KIAA1112 protein, partial coda
2032	11972	21867	7.68	3.0E-50	A0520905.1	NT		Homo sapiens mRNA for KIAA1112 protein, partial coda
3050	13017	22811	3.71	3.0E-50	4502014	NT		Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3060	13017	22812	3.71	3.0E-50	4502014	NT		Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3753	13869	23446	1.17	3.0E-50	4500044	NT		Homo sapiens zona pellucida glycoprotein 2 (ZP2) mRNA
4683	14659	24366	1.07	3.0E-50	47563529	NT		Homo sapiens Testis-specific X-related protein on Y (XRAY) mRNA
4774	14616	24406	1.85	3.0E-50	7421522	NT		Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPT), mRNA
6772	15079	25766	2.03	3.0E-50	8624074	NT		Homo sapiens protein PRG1741 (PRG1741) mRNA
6332	16216	26377	1.82	3.0E-50	5451437	NT		Homo sapiens nuclear receptor co-repressor 1 (NCOR1), mRNA
6529	16509	26597	1.23	3.0E-50	X12566.1	NT		Human mRNA for dRb proto-oncogene
6529	16509	26598	1.23	3.0E-50	X12566.1	NT		Human mRNA for dRb proto-oncogene
9333	{0 914}	19031	1.54	3.0E-50	11417895	NT		Homo sapiens gamma-glia-tumour necrosis factor-like cytokine 1 (TGM1), mRNA
9474	19101		3.0	3.0E-50	11417895	NT		Homo sapiens gamma-glia-tumour necrosis factor-like cytokine 1 (TGM1), mRNA
7565	17406		5.01	2.0E-50	A03974.1	EST_HUMAN	EST150633 Jurkat T-cell V Homo sapiens cDNA 5' end	
6003	17853	28341	2.47	2.0E-50	B0358584.1	EST_HUMAN	FC03N10036-10037-032-007 NT0036 Homo sapiens cDNA	
8205	18098	28341	1.84	2.0E-50	AV440986.1	EST_HUMAN	fm0704-x1 NIH 3T3C_17 Homo sapiens cDNA clone IMAGE2361654_5'	
8205	18099	28342	1.84	2.0E-50	AV440986.1	EST_HUMAN	fm0704-x1 NIH 3T3C_17 Homo sapiens cDNA clone IMAGE2361654_5'	
9235	18953	25359	5.14	2.0E-50	A031809.1	EST_HUMAN	fm050c12-x1 NIH 3T3C_17 Homo sapiens cDNA clone IMAGE23591654_5'	
9756	19611	24987	2.75	2.0E-50	L17645.1	NT		Q86542 RTV-H PROTEIN, contains LTR b1 LTR repetitive element;
157	10131		3.58	1.0E-49	BE25054611.1	EST_HUMAN	Homo sapiens aldehyde-thiol mRNA, complete cds	
2576	12446		2.46	1.0E-49	AA748468.1	EST_HUMAN	6017675371 NIH 3T3C_17 Homo sapiens cDNA clone IMAGE3431627_5'	
6463	16522	28468	1.29	1.0E-49	AJ303894.1	NT		AB091151 NG1 CGA_1 G381 Homo sapiens cDNA clone IMAGE3090283 similar to TRQ1557
7400	17318	27524	1.22	1.0E-49	11416850	NT		C16397 MER-297 TRANSFECTABLE, COMPLETE CONSENSUS SEQUENCE; ;
6229	16522	28468	8.32	1.0E-49	AJ303894.1	NT		Homo sapiens zinc finger protein 276 (ZFP276) mRNA
1445	11860	2124	2.71	1.0E-49	4751459	NT		Homo sapiens small nuclear ribonucleoprotein D3 (SNRPD3) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NC:	ORF SEQ ID NC:	Expression Signal	Most Similar (Top) HT BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2125	12013	21911	2.7	8.0E-90	5174656 NT	Homo sapiens differentiation-related gene 1 (nickel-specific induction protein) (RTP) mRNA	
2125	12013	21912	2.7	8.0E-90	5174656 NT	Homo sapiens differentiation-related gene 1 (nickel-specific induction protein) (RTP) mRNA	
5640	16553	25951	1.41	8.0E-90	AB029004.1	Homo sapiens protein for KIAA01831 protein, partial cds	
6854	18254	25718	2.6	8.0E-90	X17033.1	Human mRNA for integrin alpha-2 subunit	
7174	17051	27240	2.26	8.0E-90	1129269 NT	Homo sapiens S-antigen, retina and pineal gland (arrestin) (SACG) mRNA	
7451	17260	27465	1.68	8.0E-90	11417118 NT	Homo sapiens KIAA0333 protein (KIAA0333) mRNA	
7481	17260	27496	1.68	8.0E-90	11417118 NT	Homo sapiens KIAA0333 protein (KIAA0333) mRNA	
8207	18091	28344	5.38	8.0E-90	AI126042.4	Homo sapiens chronicomine 21 segment HS21C004	
8207	18091	28345	5.38	8.0E-90	AI126042.4	Homo sapiens chronicomine 21 segment HS21C004	
737	10860	20504	6.00	7.0E-90	AF052006.1	Homo sapiens MHC class I region	
738	10860	20504	32.94	7.0E-90	AF052006.1	Homo sapiens MHC class I region	
768	10127	20567	1.15	7.0E-90	4504854 NT	Homo sapiens interferon 10 receptor, beta (IFRbeta) mRNA	
2081	11071	21985	1.56	7.0E-90	AF077148.1	Homo sapiens collagen 4A1 (COL4A1) mRNA, complete cds	
4038	13958	23165	2.63	7.0E-90	4552488 NT	Homo sapiens cofilin 1 (COFL) mRNA	
7412	17270	27488	3.28	7.0E-90	HB8041.1	Y11204.1 Scores fetal liver sphex 1N1.5 Homo sapiens cDNA clone IMAGE:2056987 5' similar to contains LTR repetitive element;	
8871	18559	28943	1.98	7.0E-90	HB8041.1	Y11204.1 Scores fetal liver sphex 1N1.5 Homo sapiens cDNA clone IMAGE:2056987 5' similar to contains LTR repetitive element;	
6914	16792	-	7.13	6.0E-90	HB2458.1	EST HUMAN	
78	10062	16878	1.94	6.0E-90	AB029171.1	EST HUMAN	
78	10062	16879	1.94	6.0E-90	AB029171.1	EST HUMAN	
78	10062	16879	1.94	6.0E-90	AB029171.1	EST HUMAN	
2169	12075	21679	0.93	4.0E-90	AV165206.1	CPR repetitive element;	
2188	12075	21980	0.93	4.0E-90	AV165206.1	W152c07_x1 Scores, NF-L T GB3, ST1 Homo sapiens cDNA clone IMAGE:2359212 3'	
2942	12869	-	1.12	4.0E-90	AA129803.1	EST HUMAN	
1815	11712	21561	4.85	3.0E-90	BE552691.1	EST HUMAN	
1826	11723	21562	2.22	3.0E-90	BE552691.1	EST HUMAN	
4334	14535	24035	2.08	3.0E-90	AJ277795.1	Homo sapiens Ig superfamily member 1; segment 1/2	
6463	15893	25843	2.06	3.0E-90	AV188610.1	RC3-LT0225-200105-012-0101 L7023 Homo sapiens DNA	
6153	16111	24875	1.31	3.0E-90	AJ7026814.1	ABD0111.6 NCL CG3 Kid mouse cDNA clone IMAGE:1534053 5' similar to SWI UDP-MOUSE	
6856	16775	26989	5.4	3.0E-90	5174641 NT	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA	
6856	16775	26990	5.4	3.0E-90	5174641 NT	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA	

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Single Exon Proteins Expressed in Heart

Probe Seq ID No.:	Exon Seq ID NC:	ORF Seq ID No.:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6960	16957	27061	2.59	3.0E-90	AI040255.1	EST_HUMAN	cc56989.x1 Scores NH-MPU_S1 Homo sapiens cDNA clone [MAGE:1690337 3' similar to SW-FORM MOUSE Q10sgp FORMIN]
7077	16954	27147	4.7	3.0E-90	51746544 NT	EST_HUMAN	Homo sapiens protein dehydrogenase (oroline oxidase) [PRODH] mRNA
7566	17420	27637	3.94	3.0E-90	BF102621.1	EST_HUMAN	60186527x1 FNH-MOC_5y Homo sapiens cDNA clone [MAGE:5930950 5'
28	10015	10810	1.79	2.0E-90	AY008285.1	NT	Homo sapiens soluble carrier (SLC2A18) mRNA, complete cds; nuclear gene for mitochondrial product
1405	11310	21171	2.89	2.0E-90	Z11694.1	NT	H.sapiens 4f1Da protein kinase related to rat ERK2
1661	11563	21482	1.29	2.0E-90	WA4603.1	NT	Human ber protein mRNA, 5' end
3859	13760	24543	0.78	2.0E-90	AF231919.1	NT	Homo sapiens cholinesterase, 21 unknown in RNA
5970	15816	25941	1.37	2.0E-90	AF304877.1	NT	Homo sapiens pro- α 1(I) collagen (COL1A2) gene, complete cds
6063	15103	24860	2.44	2.0E-90	45005404 NT	NT	Homo sapiens confitophop releasing hormone receptor 2 (CRHR2) mRNA
6059	15103	24861	2.44	2.0E-90	45005044 NT	NT	Homo sapiens confitophop releasing hormone receptor 2 (CRHR2) mRNA
6222	16088	26226	3.22	2.0E-90	AA311156.1	EST_HUMAN	EST161540 Jurkat T-cell V Homo sapiens cDNA 5' end similar to prothymosin, alpha
6222	16088	26258	3.22	2.0E-90	AA311159.1	EST_HUMAN	EST161640 Jurkat T-cell V Homo sapiens cDNA 5' end similar to prothymosin, alpha
7145	17022	27216	3.86	2.0E-90	L39033.1	NT	Human pre-B cell stimulating factor homologue (SDF-1) mRNA, complete cds
7782	17682	27696	1.89	2.0E-90	11001659 NT	NT	Homo sapiens serine domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A (SEMA6A), mRNA
7792	17582	27807	1.89	2.0E-90	11981659 NT	NT	Homo sapiens serine domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A (SEMA6A), mRNA
9506	19123		2.86	2.0E-90	11411952 NT	NT	Homo sapiens non-redundant chromosome protein 2(S, carboxyl)-like 1 (NP-2L1), mRNA
9659	19873		1.31	2.0E-90	AF068757.1	NT	Homo sapiens somatostatin receptor subtype 3 (SSTR3) gene, 5' flanking region and partial cds
9841	19209		1.46	2.0E-90	11411958 NT	NT	Homo sapiens similar to RSPC022 protein (R. sapiens) (LOC003504), mRNA
9888	19220		1.47	2.0E-90	AB011390.1	NT	Homo sapiens gene for Atp-6, complete cds
9957	19120	26569	1.4	1.0E-90	11411957 NT	NT	Homo sapiens cardiac channel, voltage-dependent, alpha 1 subunit (CACNA1), mRNA
5111	10453	20294	1.58	1.0E-90	BE1776586.1	EST_HUMAN	FN5-1/10005-27/2000-001 NT Homo sapiens cDNA clone [MAGE:1007192 5'
3827		13739	28551	1.12	1.0E-90	AU145389 Y798A1 Homo sapiens cDNA clone Y798A1/00545	
4874	14754	24553	1.1	1.0E-90	AL165285.2	NT	Homo sapiens chromosome 21 segment 1:IS21C005
7096	16983		2.9	1.0E-90	AA244941.1	EST_HUMAN	nc04r12.1 NCL CGAP_Pt_Homo sapiens cDNA clone [MAGE:1007192 similar to contains L11L1 repetitive element]
7101	16978	27170	1.58	1.0E-90	AV754081.1	EST_HUMAN	AV754081.x1 Homo sapiens cDNA clone [TGA4D05 5'
1083	16869	20840	1.9	1.0E-90	AA118944.1	EST_HUMAN	AU163461 HEBA1 Homo sapiens cDNA clone [MAGE:1005633 5'
2855	12602	22305	1.39	1.0E-90	AV705762.1	EST_HUMAN	WDB510_x1 NC1 CGAP_Co1 Homo sapiens cDNA clone [MAGE:2505655 3'
2855	12602	22398	1.39	1.0E-90	AV008478.1	EST_HUMAN	WDB510_x1 NC1 CGAP_Co1 Homo sapiens cDNA clone [MAGE:2505655 3'
2921	12548		1.74	1.0E-90	K67147.1	NT	Human endogenous retrovirus pHE_1 (TER9)

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 Single Exon Probes Expressed in Heart

Probe Seq ID No.	Exon Seq ID No.	ORF ID No.	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
122	10098	19918	0.94	7.0E-51	7706670	NT	Homo sapiens PRX2b protein (PRX2b), mRNA
122	10098	19919	0.94	7.0E-51	7706670	NT	Homo sapiens PRX2b protein (PRX2b), mRNA
123	10098	19918	0.86	7.0E-51	7706670	NT	Homo sapiens PRX2b protein (PRX2b), mRNA
123	10098	19919	0.86	7.0E-51	7706670	NT	Homo sapiens PRX2b protein (PRX2b), mRNA
285	10230	20045	2	6.0E-51	BE-406910.1	EST_HUMAN	601300568F NIH MAGE-21 Homo sapiens cDNA clone IMAGE-3035460 5'
794	10723	20584			BE-406910.1	EST_HUMAN	601300568F NIH MAGE-21 Homo sapiens cDNA clone IMAGE-3035460 5'
1299	11206	21060	10.28	3.0E-51	Af119862.1	NT	Homo sapiens PRO14 mRNA, complete cds
1612	11516	21976	0.95	6.0E-51	BE-267400.1	EST_HUMAN	601102236F NIH MAGE-15 Homo sapiens cDNA clone IMAGE-3362145 5'
1623	11632	21992	2.12	6.0E-51	AF260633.1	EST_HUMAN	60168695 F1.21 Homo sapiens cDNA clone IMAGE-108659 3'
3268	13189	22987	8.10	6.0E-51	AU106591	EST_HUMAN	AU106596 N12R25 Homo sapiens cDNA clone N12R25-300/200 3' (alternatively spliced) [Human, B cells, mRNA, Partin, 375 n]
5974	15853	25884	2.92	6.0E-51	SP79248.1	NT	Ig-like B29-CD76 (alternatively spliced) [Human, B cells, mRNA, Partin, 375 n]
6344	16207	26370	1.93	6.0E-51	U244468.1	NT	Human autosomal dominant polytopic kidney disease protein 1 (PKD1) gene
6402	16351	26521	2.03	6.0E-51	AF050573.1	NT	Homo sapiens general transcription factor 2A (GTF2A) mRNA, complete cds
9447	10723	20584	1.43	6.0E-51	BE-406910.1	EST_HUMAN	601300568F NIH MAGE-21 Homo sapiens cDNA clone IMAGE-3035460 5'
1685	11658	21421	1.78	6.0E-51	45060008	NT	Homo sapiens protein phosphatase 1 regulatory subunit 0 (PP1R0) mRNA
3000	12928	22720	1.02	6.0E-51	AF162379.2	NT	Homo sapiens chromosome 21 segment 0.15S21C076
3114	13036	22835	0.84	6.0E-51	AB200632.1	NT	Homo sapiens KIAA0825 protein, partial cds
3161	13096	22890	1.9	6.0E-51	NT	Homo sapiens amyloid beta (A4) precursor protein (beta-amyloid, Alzheimer disease) (APP), mRNA	
3889	13809		1.68	6.0E-51	AJ229041.1	EST_HUMAN	601300568F NIH MAGE-44 Homo sapiens cDNA clone IMAGE-3331220 5'
6213	18941		2.76	4.0E-51	AY781140	EST_HUMAN	AV731140 HIF1 Homo sapiens cDNA clone HIF1B(11.028), mRNA
4119	14016	23797	1.13	3.0E-51	BE326270.1	EST_HUMAN	601300568F NIH MAGE-44 Homo sapiens cDNA clone IMAGE-3331220 5'
460	10433	20346	1.5	2.0E-51	B627529	EST_HUMAN	Homo sapiens hypophyseal protein FLJ1128 (FLJ1128), mRNA
1194	1104	20950	1.35	2.0E-51	BE168470.1	EST_HUMAN	CY747115-13-060405-147-001 HT0515 Homo sapiens cDNA y55211.1
1194	1104	20951	1.35	2.0E-51	BE168470.1	EST_HUMAN	CY747115-13-060405-147-001 HT0515 Homo sapiens cDNA y55211.1
1642	11546	21407	1.31	2.0E-51	NA30398.1	EST_HUMAN	y55244.655 RIBOSOMAL PROTEIN, 3.5A (HUMAN), gbk.1
2109	11958	21897	1.41	2.0E-51	4765603	NT	Homo sapiens Calmodulin (CLGN), mRNA
2304	12472		1.16	2.0E-51	NA38997.1	EST_HUMAN	SYN1171 Serine/threonine kinase 28Hb Homo sapiens cDNA clone IMAGE-270765 5'
5871	15777	28686	1.7	2.0E-51	1142618	NT	Homo sapiens ATPase, H+ transporting, lysosomal vacuolar proton pump, non-catalytic accessory protein 1A (110/10nD) (ATP1A1), mRNA
7212	17086	22729	1.33	2.0E-51	AV650437.1	EST_HUMAN	AV650437 GCKL Home sapiens cDNA clone GKCL6N6 5'
7707	17557	27783	1.82	2.0E-51	AV500256.1	EST_HUMAN	U1-HBN-04d-152-4-U1T NIH MGC-50 Homo sapiens cDNA clone IMAGE-30765774 5'
7885	17356	27797	3.09	2.0E-51	1142778	NT	Homo sapiens polymerase (RNA) III (DNA-directed) (3RD) (RCF39), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) HIT BLAST E Value	Top HIT Accession No.	Top Hit Database Source	Top Hit Descriptor
8258	18138	428	10573	7.14 0.95	2.0E-61 AL 65203.2	11419729 NT	Human sapiens ribosomal protein L44 (RPL44), mRNA Human sapiens chromosome 21 segment HS21:0003
7361	10866	20524	11285	1.32 1.0E-61	1.0E-61 AL 65203.2	5458529 NT	Human sapiens orbitin recognition complex, subunit 2 (yeast homolog)-like (ORC2L), mRNA Human sapiens chromosome 21 segment HS21:0003
1377	11285	21158	1.0E-61	1.0E-61 AL 65203.2	NT	Human sapiens chromosome 21 segment HS21:0003	
1731	11632	11711	0.97 1.0E-61	1.0E-61 U32657.1	NT	Human polymorphic nucleotide repeat in X-linked retinol pigmentosac (RP3) gene region	
1814	21500	21985	4.47 1.0E-61	1.0E-61 AL 65203.2	60016563 NT	Human sapiens zona pellucida glycoprotein 3A (sperm receptor), mRNA [ntr11:b06.y1] NCBI CGAP LS Human sapiens cDNA clone IMAGE:2993369 5' similar to contains element	
2150	12338	21853	1.46 1.0E-61	1.0E-61 AL 65203.2	EST_HUMAN MSR1	EST_HUMAN MSR1	
2854	12724	21853	1.57 1.0E-61	1.0E-61 AL 65203.2	EST_HUMAN MSR1	EST_HUMAN MSR1	
3330	13260	23055	0.86 1.0E-61	1.0E-61 BE 714455.1	7862519 NT	Human sapiens KIAA0806 gene product (KIAA0806), mRNA [Q524H-T057Y-T4D30-077-508 HTG077] Human sapiens cDNA	
3671	13985	23372	1.47 1.0E-61	1.0E-61 AL 65203.2	4756249 NT	Human sapiens TRAF family member-associated NFKB activator (TANK), mRNA Human sapiens TRAF family member-associated NFKB activator (TANK), mRNA	
4339	14236	24019	0.95 1.0E-61	1.0E-61 AL 65203.2	4756249 NT	Human sapiens TSHZ3 gene product (TSHZ3), mRNA [U+H-BW-Cjg-08-D-11.1 NCBI CGAP Sub Human sapiens cDNA clone IMAGE:2722871 3'	
4751	14393	24422	7.63 1.0E-61	1.0E-61 AL 65203.2	EST_HUMAN U+H-BW-Cjg-08-D-11.1 NCBI CGAP Sub Human sapiens cDNA clone IMAGE:2722871 3'		
4751	14393	24423	7.03 1.0E-61	1.0E-61 AV 298181.1	EST_HUMAN U+H-BW-Cjg-08-D-11.1 NCBI CGAP Sub Human sapiens cDNA clone IMAGE:2722871 3'		
6124	16671	24535	0.85 1.0E-61	1.0E-61 AL 65203.2	NT	Human sapiens chromosome 21 segment HS21:0003	
6286	16133	26237	7.19 1.0E-61	1.0E-61 AL 65203.2	NT	Human P450 T-cell and mast cell gene (P450), mRNA, complete cds Human sapiens hydrochloric protein FLJ20228 (FLJ20228), mRNA	
6286	16133	26288	1.4 1.0E-61	1.0E-61 AL 65203.2	8622130 NT	Human sapiens hypothetical protein FLJ20228 (FLJ20228), mRNA	
6720	18600	28600	3.38 1.0E-61	1.0E-61 AL 65203.2	8622130 NT	Human sapiens growth hormone releasing hormone (GH-RH), mRNA	
6838	19717	28910	3.59 1.0E-61	1.0E-61 AL 65203.2	11436460 NT	Human sapiens macrodiasine, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 [UBC203] genes, complete cds	
7346	17216	27840	2.70 1.0E-61	1.0E-61 AL 65203.2	NT	Human sapiens BDNF070-240100-010-010 BN0070 Human sapiens cDNA	
7703	17613	28169	6.28 1.0E-61	1.0E-61 AL 65203.2	11426382 NT	Human sapiens KIAA0971 protein (KIAA0971), mRNA Human sapiens actinin, alpha 4 (ACTN4), mRNA	
8031	17623	28169	1.98 1.0E-61	1.0E-61 AL 65203.2	112425978 NT	Human sapiens actinin, alpha 4 (ACTN4), mRNA	
9110	19831	19831	2.98 1.0E-61	1.0E-61 AB 011396.1	NT	Human sapiens kox domain lipoprotein-related protein 2 (KLIP2), mRNA Human sapiens kox domain lipoprotein-related protein 2 (KLIP2), mRNA	
9149	19820	25002	2.98 1.0E-61	1.0E-61 AL 65203.2	11436460 NT	Human sapiens kox domain lipoprotein-related protein 2 (KLIP2), mRNA Human sapiens kox domain lipoprotein-related protein 2 (KLIP2), mRNA	
9515	19728	25261	1.18 1.0E-61	1.0E-61 AL 65203.2	114191327 NT	Human kappa-immunophilin-binding protein 1 (KIPF1), mRNA [C0278y1] NCBI CGAP Human sapiens cDNA clone IMAGE:1354726 3' similar to SW-POL_MLVRK	
9805	19317	25261	8.25 1.0E-61	1.0E-61 AL 65203.2	114191327 NT	Human kappa-immunophilin-binding protein 1 (KIPF1), mRNA [C0278y1] NCBI CGAP Human sapiens cDNA clone IMAGE:1354726 3' similar to SW-POL_MLVRK	
4451	14545	24138	0.79 1.0E-61	1.0E-61 AA 768865.1	EST_HUMAN Irr7501.51 NCBI CGAP Human sapiens cDNA clone IMAGE:1301328 3'	[P2778y1] NCBI CGAP Human sapiens cDNA clone IMAGE:1301328 3'	
9853	19417	20848	1.56 1.0E-61	1.0E-61 AL 65203.2	EST_HUMAN Irr74334 CGAP Human sapiens cDNA clone IMAGE:1301328 3'	[P2778y1] NCBI CGAP Human sapiens cDNA clone IMAGE:1301328 3'	
1091	19077	20848	1.27 1.0E-61	1.0E-61 AL 65203.2	EST_HUMAN Irr74334 CGAP Human sapiens cDNA clone IMAGE:1301328 3'	[P2778y1] NCBI CGAP Human sapiens cDNA clone IMAGE:1301328 3'	

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
NUCLEOLAR TRANSCRIPTION FACTOR 1 (UPSTREAM BINDING FACTOR 1) (UBF-1)							
3462	13378	23184	0.78	7.0E-02	P17480	SWISSPROT	q96j40; XLT Scores: testis; NHT Homo sapiens cDNA clone IMAGE:1859150 3' similar to TROT5103
8657	18546	28829	4	7.0E-02	A12028881.1	EST_HUMAN	Q16103; HYPOTHEtical 27 kD PROTEIN;
2669	12286	12286	1.07	6.0E-02	U09410.1	NT	Human zinc finger protein ZNF193 mRNA; partial cds
3338	12286	12286	6.0E-02	11492556	CG1-66 protein [CG1-66]; mRNA	Hom sapiens cDNA clone IMAGE:23980251 3'	
6496	16355	28525	3.83	6.0E-02	A1762801.1	EST_HUMAN	W04021x1 INCL COAP; Q111 Homo sapiens cDNA clone IMAGE:23980251 3'
6460	28526	28526	3.33	6.0E-02	A1762801.1	EST_HUMAN	W04021x1 INCL COAP; Q111 Homo sapiens cDNA clone IMAGE:23980251 3'
8904	10893	28972	1.4	6.0E-02	11492556	NT	Hom sapiens CGB18 protein [LOC51008]; mRNA
7386	17255	27160	2.76	6.0E-02	AW141593.1	EST_HUMAN	NP_572023; 13010025-4691 Homo sapiens cDNA
410	10356	20183	1.49	5.0E-02	A1650528.21	EST_HUMAN	W051071x1 NCI_GAP; L208 Homo sapiens cDNA clone IMAGE:25472043 3' similar to SWI/GG66; HUMAN
2356	12236	22132	3.26	5.0E-02	A1271725.1	NT	Q08379; GLN-SH; pentapeptide element HER22 repetitive element;
2356	12236	22133	3.26	5.0E-02	A1271725.1	NT	Hom sapiens Xa protease/urokinase receptor; Segment 1/2
5372	12291	23960	2.17	5.0E-02	4567558	NT	Hom sapiens Handlike receptor 3 (RTR); mRNA
4233	14131	23807	1.95	5.0E-02	AA41068.1	EST_HUMAN	2707800.1; XLT Scores: heart; NHT Homo sapiens cDNA clone IMAGE:782344 3' similar to SWI/NRDC_RAT
7482	17342	27555	5.0E-02	AV110687.1	EST_HUMAN	PH47245; NAFLD_YSN; IN	
8587	18455	28723	4.91	5.0E-02	11425574	NT	Hom sapiens muscle specific gene (MS); mRNA
8587	18455	28724	4.91	5.0E-02	11425574	NT	Hom sapiens muscle specific gene (MS); mRNA
822	10730	20897	3.47	4.0E-02	AV161479.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
822	10750	20598	3.47	4.0E-02	AV161478.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
823	10750	20597	4.83	4.0E-02	AV161479.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
823	10750	20598	4.63	4.0E-02	AV161479.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
1446	11331		0.99	4.0E-02	A131128.1	EST_HUMAN	EST120245; Juvenile hairy Hom sapiens cDNA 5' and
							W12608.1; Scores: NEL_T; GBC_S1 Homo sapiens cDNA clone IMAGE:2380556 3' similar to
2409	12286	22183	1.59	4.0E-02	A1827900.1	EST_HUMAN	PhiX174; NEL_T; GBC_S1 Homo sapiens cDNA clone IMAGE:2380359 3' similar to
2409	12286	22184	1.39	4.0E-02	A1827900.1	EST_HUMAN	W12608.1; Scores: NEL_T; GBC_S1 Homo sapiens cDNA clone IMAGE:2380359 3' similar to
3353	13273		0.6	4.0E-02	455787	NT	Hom sapiens keratin 18 (KRT18); mRNA

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							Top Hit	mRNA	
4847	14824		2.03	4.0E-02	AJ243215.1	NT	Homo sapiens partial EHT4 receptor gene, exons 2 to 6		
5608	185524	269003	1.56	4.0E-02	45060788	NT	Homo sapiens sole carrier family 13 (solium-dependent dicarboxylate transporter), member 2 (SLC13A2)		
5904	157070	256222	2.42	4.0E-02	11420545	NT	Homo sapiens ubiquitin specific protease 9, X chromosome (Drosophila fat facets related) (USP9X), mRNA		
6054	18120	262773	1.98	4.0E-02	11420141	NT	Homo sapiens phosphotyrosine phosphatase synthase 2 (PTPS2), mRNA		
6498	183357	265228	2.21	4.0E-02	7607057	NT	Homo sapiens cyclin-dependent transcription initiation factor 2B, subunit 2 beta, 36kD (CDTBP2), mRNA		
6498	183357	265229	1.00	4.0E-02	7607057	NT	Homo sapiens cyclin-dependent transcription initiation factor 2B, subunit 2 beta, 36kD (CDTBP2), mRNA		
7154	17011	27204	6.3	4.0E-02	A9039090.1	NT	Homo sapiens mRNA for KIAA1265 protein, partial cds		
8377	18224	289533	2.43	4.0E-02	Z781765.1	NT	H.sapiens flow-sorted chromosome 6 (flattened fragment, SC6pA)@G3		
8377	18224	289509	2.43	4.0E-02	Z781765.1	NT	H.sapiens flow-sorted chromosome 6 (flattened fragment, SC6pA)@G3		
9135	18881	28792	2.95	4.0E-02	114181686	NT	Homo sapiens putative nuclear protein (HRH1)@F22.22, mRNA		
9355	18578		2.98	4.0E-02	114181682	NT	Homo sapiens a non-helical chromosome e protein 2 (S, catenoidase-like kinase 1 (NHP2L1)), mRNA		
9749	18305	25201	1.99	4.0E-02	114186322	NT	Homo sapiens cell-free culture EGFL6 segmental 3-type receptor 1 (EGFR3), mRNA		
9762	18592	25198	4.2	4.0E-02	11417825	NT	Homo sapiens calcineurin binding protein 1 (KIAA0380), mRNA		
9762	18592	25199	4.2	4.0E-02	11417822	NT	Homo sapiens calcineurin binding protein 1 (KIAA0380), mRNA		
9835	183356	26510	1.51	4.0E-02	11420460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA		
58	10053	198858	1.12	3.0E-02	4557704	NT	Homo sapiens low-molecular-weight neurokinin 2 (labile acoustic neuroma) (NFM2), mRNA		
3009	12306	22226	0.95	3.0E-02	A9040090	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds		
3008	12306	22229	0.95	3.0E-02	A9040091	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds		
3840	13554	23840	1.92	3.0E-02	X282855.1	NT	Human cyclinophilin-related processed pseudogene		
6699	18846	27038	4.35	3.0E-02	A632733.1	EST_HUMAN	WAS3D0.1x (NCL_CGAP_Klf11) Homo sapiens cDNA clone IMAGE22290003 3' similar to contains TIR12		
1211	11120	20969	1.5	2.0E-02	A1163284.2	NT	Homo sapiens chromosome 21 segment HS21C004.		
7088	18073	27185	4.8	2.0E-02	BF326911.1	EST_HUMAN	RCD-BN1284-30305003-03-045 BN020284 (Home sapiens cDNA		
7088	18973	27166	4.8	2.0E-02	BF326911.1	EST_HUMAN	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2 D 3 (UBE2D3) genes, complete cds		
7846	17696		3.04	2.0E-02	A224686.1	NT	GIV4-BN1287.0B19-03-045 BN020287.0B19-03-045 Homo sapiens cDNA		
8259	18744		8.33	2.0E-02	B5036078.1	EST_HUMAN	NT	Homo sapiens chromosome 21 segment HS21C004.	
1028	10846	20791	1.24	1.0E-02	A7298540.1	NT	Homo sapiens ADP-ribosylation factor 2 (SH3D15) mRNA, complete cds		
1526	11431	21288	6.83	1.0E-02	L78870.1	NT	stf7011.11 Soares, NHHMPU_S1 Home sapiens cDNA clone IMAGE1047404 similar to WP-K01H12.1 CE03455;		
1768	11687	21628	1.02	1.0E-02	A6626207.1	EST_HUMAN	DNK-Z25606P0104_1T_066 (synonym: Ifn2) Homo sapiens cDNA clone DKFZ566P0104_1T_066		
2864	12611	22806	1.12	1.0E-02	A0509044.1	EST_HUMAN	DNK-Z25606P0104_1T_066 (synonym: Ifn2) Homo sapiens cDNA clone DKFZ566P0104_1T_066		

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
Human Mek/mRNA-1 gene 1								
2753	12815	22506	1.34	3.0E-83	JN0310.1	NT	Human Mek/mRNA-1 gene 1	
2751	11127	20978	8.97	3.0E-83	600563	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
5886	15802	25926	21.69	3.0E-83	11548619	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
7697	17448	27663	1.82	3.0E-83	BE576158.1	EST_HUMAN	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
7507	17448	27664	1.82	3.0E-83	BE576158.1	EST_HUMAN	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
184	10156	19972	1.11	2.0E-83	JN078041	NT	Human DNA topoisomerase 2B mRNA. partial cds	
191	10163	19980	1.74	2.0E-83	488526	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
489	10432	1.30	2.0E-83	4857024	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA		
806	10738	20563	5.20	2.0E-83	7657042	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
1547	11452	21312	2.47	2.0E-83	AB0303988.1	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
1547	11452	21313	2.47	2.0E-83	AB0303988.1	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
3118	13044	22841	1.68	2.0E-83	4501066	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
3248	13171	22970	1.78	2.0E-83	AF09718.1	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
3831	13174	23535	1.86	2.0E-83	L38891.1	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
4780	14845	24434	1.13	2.0E-83	AF111167.2	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
6587	15802	25578	2.45	2.0E-83	BF737354.1	EST_HUMAN	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
6587	15802	25579	2.45	2.0E-83	BF737354.1	EST_HUMAN	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
6025	15920	26061	1.37	2.0E-83	UER0561	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
6209	15908	26103	1.41	2.0E-83	98103965	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
6209	15908	26104	1.41	2.0E-83	98103965	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
6804	16612	27034	3.8	2.0E-83	AL105210.2	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
8120	18017	28056	12.54	2.0E-83	NP08451	EST_HUMAN	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
8154	18042	28502	3.02	2.0E-83	AB008810.1	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
8154	18042	28503	3.02	2.0E-83	AB008810.1	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
8243	19523	25696	10.95	2.0E-83	11416185	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
9834	19354	25180	1.59	2.0E-83	11416157	NT	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	
4246	14145	23918	2.91	1.0E-83	FB4-55.1	EST_HUMAN	Human saelin zinc finger protein 144 (Mef-18) (ZNF144). mRNA	

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Probe SEQ ID NC:	Exon SEQ ID NC:	ORF SEQ ID NC:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4246	14146	23919	2.91	1.0E-63	F08485.1	EST_HUMAN	HSC22/D111 normalized infant brain cDNA/Homo sapiens cDNA clone c-add11
5826	15443	28509	1.39	1.0E-63	AY1622268.1	EST_HUMAN	QY053-ST021B-0601-008-5109 S7021B-Homo sapiens cDNA
6935	16813		2.3	1.0E-63	AY1622267.2	INT	Homo sapiens chromosome 21 segment 1 HSC21C047
9879	19853		3.02	1.0E-63	AY162207.2	INT	Homo sapiens chromosome 21 segment HSC21C007
0591	16471	20961	4.78	5.0E-34	AY78165.1	EST_HUMAN	HRB007-X1 NC_1 CGAP_K451_Homo sapiens cDNA clone [MAGE2]161526 3
1050	10844	7899	8.0E-64	DE862232F1 NIH_MGC_71 Homo sapiens cDNA clone [MAGE3]190386 3	EST_HUMAN	60115069638F1 NIH_MGC_71 Homo sapiens cDNA clone [MAGE3]190386 5	
5753	10844	25747	3.16	8.0E-64	DE860755.1	EST_HUMAN	60115069638F1 NIH_MGC_71 Homo sapiens cDNA clone [MAGE3]190386 5
8059	18841		2.61	8.0E-64	8.1G18177	INT	Homo sapiens Ran GTPase activating protein 1 (RAN-GAP1) mRNA
9111	16975		2.55	8.0E-64	T00565.1	EST_HUMAN	Y08621-1_Steroidogenic factor 1 (SF1) mRNA/Homo sapiens cDNA clone [MAGE7]1719 5
3486	13402		0.99	7.0E-64	BE594321.1	EST_HUMAN	6011514559T1 NIH_MGC_44 Homo sapiens cDNA clone [MAGE3]653204 6
4825	14813	24503	2.44	7.0E-64	4507490	INT	Homo sapiens thymidine kinase 1 (TK) mRNA
4626	14613	24304	2.44	7.0E-64	4507490	INT	Homo sapiens thymidine kinase 1 (TK) mRNA
7766	17816	27844	2.13	7.0E-64	Y078481	INT	Homo sapiens Evans' dar22, mpa22 and ber22 genes
1692	11664	21463	1.7	6.0E-64	A1051962.1	EST_HUMAN	label'd rNCA COAP_Go6e_Homo sapiens cDNA clone [MAGE2]09220 3' similar to gb:M16182 BE7A-
1662	11664	21464	1.7	6.0E-64	AB651962.1	EST_HUMAN	label'd rNCA COAP_Go6e_Homo sapiens cDNA clone [MAGE2]09220 3 similar to gb:M16182 BE7A-
3034	13011	22801	3.7	6.0E-64	AV028445.1	INT	WY1363-X1 NC_1 CGAP_Bm23_Homo sapiens cDNA clone [MAGE2]250446 3
3034	13011	22822	3.7	6.0E-64	AV028445.1	INT	WY1363-X1 NC_1 CGAP_Bm23_Homo sapiens cDNA clone [MAGE2]250446 3
5454	15376	25433	2.64	6.0E-64	Y116933.1	INT	Homo sapiens MCP-1 gene and enhancer region
5454	15376	25434	2.64	6.0E-64	Y116933.1	INT	Homo sapiens MCP-1 gene and enhancer region
5454	15376	25444	4.41	6.0E-64	M13975.1	INT	Homo sapiens trinucleotide homeobox 1 (MEOX3) mRNA, complete cds
6203	16167	28512	2.58	6.0E-64	11262870	INT	Homo sapiens trinucleotide homeobox 1 (MEOX3) mRNA
6253	16167	28513	2.58	6.0E-64	11262879	INT	Homo sapiens mesodermine homeobox 1 (MEOX3) mRNA
7376	17246	27451	7.8	6.0E-64	11262055	INT	Homo sapiens acetyl-CoA synthetase (LCS5692) mRNA
7412		17532	2.06	6.0E-64	AF274763.1	INT	Homo sapiens progressive ankylosis-like protein (ANK) mRNA, complete cds
7604	17455	27659	2.34	6.0E-64	S76475.1	INT	ISAC Human, brain, mRNA, 2157 nt
8151	18339	28287	7.57	6.0E-64	11262197	INT	Homo sapiens stromal antigen 3 (S1A3) mRNA
8151	18339	28288	7.57	6.0E-64	11262197	INT	Homo sapiens stromal antigen 3 (S1A3) mRNA
9282	18667	28521	4.09	6.0E-64	11262198	INT	Homo sapiens integrin 10 receptor beta (L1R4) mRNA
803	10732	20574	2.44	5.0E-64	AF231919.1	INT	Homo sapiens chromosome 21 unknown mRNA
1402	11307	21167	2.42	5.0E-64	AF40933.1	INT	Homo sapiens phosphoglycomitease-related protein (PGM2P) gene, complete cds
1402	11307	21168	2.42	5.0E-64	AF40933.1	INT	Homo sapiens phosphoglycomitease-related protein (PGM2P) gene, complete cds

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Probe Seq ID No.	Exam Seq ID No.	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1683	11655	21457	1.97	5.0E-64	U89358.1	NT	Human (3'mt) protein homolog mRNA, complete cds Homo sapiens KIAA0618 gene product (KIAA0618), mRNA
2706	11370	21235	2.06	5.0E-64	7062205	NT	Homo sapiens KIAA0618 gene product (KIAA0618), mRNA
3970	13767	23675	5.61	5.0E-64	A5071738.1	NT	Homo sapiens ribulose-1,5-bisphosphate carboxylase/oxygenase large chain mRNA, partial cds
8118	18074	28529	3.9	4.0E-64	A1V15783.1	EST_HUMAN	RC3-S1_0107_1 (2002/06/01-01/03 S10197 Homo sapiens cDNA
8168	18074	28528	3.9	4.0E-64	A1V15788.1	EST_HUMAN	RC3-S1_0107_1 (2002/06/01-01/03 S10197 Homo sapiens cDNA
2181	12039	21826	3.86	3.0E-64	C18896.1	EST_HUMAN	C18896 Human elastin cDNA (Trulyau)
3216	13140	22645	0.95	3.0E-64	B17494.1	EST_HUMAN	0017494 Human elastin cDNA clone IMAGE:3643577 5'
3386	19343	23142	1.61	3.0E-64	A1V17174.1	EST_HUMAN	A1V17174 DCA Homo sapiens cDNA clone DCA/M1C01 5'
3398	13133	23113	1.81	3.0E-64	A1V17174.1	EST_HUMAN	A1V17174 DCA Homo sapiens cDNA clone DCA/M1C01 5'
5703	18611	25713	1.34	3.0E-64	B262785.1	NT	H-sapiens isoform 1 gene for L-type calcium channel, exon 28
5611	18811	25642	3.39	3.0E-64	BF370000.1	EST_HUMAN	RCB-SFN0019-200800-01-01-G1 FN0019 Homo sapiens cDNA
6933	18811	27005	1.81	3.0E-64	A1Z84895.1	NT	Homo sapiens grp-1 major protein GM130 (GM130) (GOLG23) mRNA, complete cds
6933	18811	27006	1.81	3.0E-64	A1Z84895.1	NT	Homo sapiens grp-1 major protein GM130 (GM130) (GOLG23) mRNA, complete cds
6948	18824	27018	1.3	3.0E-64	B12062321.1	EST_HUMAN	b612n12.1Y1 NIH_MGC_12 Human sapiens cDNA clone IMAGE:3643797 5' similar to gb1.08069 DNAJ PROTEIN HOMOLOG 12 (HUMAN)
6948	18824	27017	1.3	3.0E-64	B12062321.1	EST_HUMAN	b612n12.1Y1 NIH_MGC_12 Human sapiens cDNA clone IMAGE:3643797 5' similar to gb1.08069 DNAJ PROTEIN HOMOLOG 12 (HUMAN)
7422	12269	21979	1.28	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
7422	12269	27498	1.26	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
8955	18434	28703	1.76	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
8955	18434	28704	1.76	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
8958	18746	29040	4.59	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1072	10688	20851	0.94	2.0E-64	A1W06940.1	EST_HUMAN	ANR005_S1_Score=-0.94 NT Homo sapiens cDNA clone IMAGE:1031165 3'
1370	11282	21137	1.32	2.0E-64	4757701	NT	Homo sapiens effector-like cap-binding protein (ECP) mRNA wdb7001_x1 NCI_OGAP_Kid11 Homo sapiens cDNA clone IMAGE:2462281 3' similar to contains element L1 repetitive element;
2478	12354	22252	1.78	2.0E-64	AB27050.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
2484	12359	22253	3.03	2.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2484	12359	22253	3.03	2.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
3101	13027	22823	2.66	2.0E-64	4504008.1	EST_HUMAN	Homo sapiens glutathione S-transferase mitochondrial (aspartate amidotransferase 2) (GOT2), nuclear gene encoding mitochondrial protein, mRNA
3719	13631	23416	1.33	2.0E-64	AY066145.1	EST_HUMAN	ES1370215 MAGE1 sequences, MAGE1 Homo sapiens cDNA
3719	13631	23417	1.33	2.0E-64	AY066145.1	EST_HUMAN	ES1370215 MAGE1 sequences, MAGE1 Homo sapiens cDNA
6653	15955	25662	2.02	2.0E-64	AU124581.1	EST_HUMAN	AU124581 NT Homo sapiens cDNA clone N175M120021 13'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal Value	Most Similar (Top) HIT BLAST E Value	Top HIT Accession No.	Too Hit Database Source	Too Hit Descriptor
5783 168699 25799	1.3	2.0E-64 AF113708.1	INT	Human sequins angiopoietin 4 (ANG4) mRNA, partial cds			
5606 16812 26539	4.97	2.0E-64 BP068532.1	EST_HUMAN	602123-74F1 NIH MGIC 56 Homo sapiens cDNA clone IMAGE:42805945			
5606 168690 26904	1.31	2.0E-64 AF1078387.1	EST_HUMAN	022605-31 Scores total feula Nib21f8 8y Homo sapiens cDNA clone IMAGE:1978773			
6023 165928 26050	3.95	2.0E-64 JN7185.1	NT	H-sapiens dopamine receptor 1, partial cds			
8144 180522 28579	2.85	2.0E-64 AF0528114.1	EST_HUMAN	602040-21F1 NIH MGIC 56 Homo sapiens cDNA clone IMAGE:4180566			
8406 182822 28534	6.24	2.0E-64 AI0229511.1	EST_HUMAN	wn81606-xt NCI CGAP UH Homo sapiens cDNA clone IMAGE:24522113			
8406 182822 28535	6.4	2.0E-64 AI0229511.1	EST_HUMAN	wn81606-xt NCI CGAP UH Homo sapiens cDNA clone IMAGE:24522113			
9182 18921 25547	1.73	2.0E-64 B5673987	NT	Human sequins period (Drosophila homolog 3 (PER3), mRNA			
9017 16915 2588	2.98	2.0E-64 JN51621.1	EST_HUMAN	C4F220107 Chromosome 22 exon Homo sapiens cDNA clone C22_132			
268 10224 20039	1.74	1.0E-64 AF231919.1	NT	Human sequins chromosome 21 unknown mRNA			
1740 11641 21503	5.98	1.0E-64 AI026419.1	EST_HUMAN	000001-xt Schneider fetal brain 000001 Homo sapiens cDNA clone IMAGE:2519136	3 similar to		
3466 13932 23188	6.61	1.0E-64 AF08778.1	NT	Human sequins transcription factor (GSM) ontarce 3, JMM1 protein, JMM1 protein, T64 protein, synapsophytin genes, complete cds, and t-RNA calcium channel, α>			
3466 13932 23248	1.32	1.0E-64 AF228227.1	NT	Human sequins TRUDS mRNA, partial cds			
3536 13432 23249	1.32	1.0E-64 AF228227.1	NT	Human sequins TRUDS mRNA, partial cds			
9154 18604 22917	1.62	1.0E-64 AI-163246.2	NT	Human sequins chromosome 21 segment 16S21C046			
2230 12115 22917	0.93	6.0E-65 X69211.1	NT	H-sapiens DNA for endogenous retroviral like element			
2230 12115 22918	0.93	6.0E-65 X69211.1	NT	H-sapiens DNA for endogenous retroviral like element			
8822 18695 22802	15.1	9.0E-65 Bf330676.1	EST_HUMAN	GV4-BT0257-081199-017-603 BT0257 Homo sapiens cDNA clone IMAGE:2000053 similar to			
8709 18613 28603	10.83	8.0E-65 AI020244.1	EST_HUMAN	AuB8107-xt Schneider fetal brain 000001 Homo sapiens cDNA clone IMAGE:2000053 similar to			
7841 17691 27939	2.16	7.0E-65 BE061055.1	EST_HUMAN	SW-RI-21 HUMAN P6778 60S RIBOSOMAL PROTEIN L21.1			
1040 10958 20801	1.32	6.0E-65 AV721986.1	EST_HUMAN	QV210705-20406-162-02 BT0933 Homo sapiens cDNA clone IMAGE:737473			
1880 11776	8.32	6.0E-65 AA520629.1	EST_HUMAN	NB8410.51 NCI CGAP Ph11 Homo sapiens cDNA clone IMAGE:3992379 similar to gbk:K039002 60S RIBOSOMAL PROTEIN L32 (HUMAN);			
7080 19897 27150	2.52	6.0E-65 AW085252.1	EST_HUMAN	xcn7080-nd NCI CGAP_C021 Homo sapiens cDNA clone IMAGE:2093545 3 similar to TR-QB3306 QBS306			
7209 17095 27276	4.25	6.0E-65 AA427678.1	EST_HUMAN	LONG INTERSPERSED REPETITIVE DNA CONTAINING 7 ORF 8; contains L1, B1, L1 repetitive element; zan83005-xt Scores total feula Nib21f8 8y Homo sapiens cDNA clone IMAGE:737473			
7209 17095 27276	4.25	6.0E-65 AA427678.1	EST_HUMAN	zam83005-xt Scores total feula Nib21f8 8y Homo sapiens cDNA clone IMAGE:737473			
8247 18127 28575	6.18	6.0E-65 Bf350761.1	EST_HUMAN	8Y540405F1 NIH MGIC 52 Homo sapiens cDNA clone IMAGE:3982977			
8767 15602 25952	4.76	6.0E-65 AL165210.2	NT	Human sequins chromosome 21 segment HS21 segment 10			

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal Value	Most Similar (Top) BLAST E Value	Top Hit Assession No.	Top Hit Database Source	Top Hit Descriptor	
6715	10551	20362	0.91	6.0E-65	A/FG04604.1	NT	Homo sapiens KEGG protein mRNA, partial cds	
1331	11238	21094	1.92	5.0E-65	706/1951	NT	Homo sapiens KIAA0156 gene product (KIAA0156), mRNA	
1331	11238	21095	1.62	5.0E-65	706/1951	NT	Homo sapiens SPAD-colony mRNA for peroxisomaldehyde dehydrogenase type I, complete cds	
2110	11959	21686	1.02	5.0E-65	A/SG35786.1	NT	Homo sapiens ubiquitin specific protease 13 (ubiquitinopeptidase T-3) (USP13), mRNA	
3217	13141	22844	1.91	5.0E-65	4507848	NT	Homo sapiens ubiquitin specific protease 13 (ubiquitinopeptidase T-3) (USP13), mRNA	
3217	13141	22845	1.91	5.0E-65	4507848	NT	Homo sapiens ubiquitin specific protease 13 (ubiquitinopeptidase T-3) (USP13), mRNA	
186	10159	19875	1.09	4.9E-65	AL120419.1	EST_HUMAN	DIC2761/G108_r1_781 (synonym: Homo sapiens cDNA clone DKFZp761G108_5	
728	10680	20491	1.95	4.0E-65	A/2854958.1	EST_HUMAN	gi 460141 Saccare_japonica_809 Hypothetical protein saccare_japonica_809 IMAGE:1881800_3	
728	10680	20492	1.56	4.0E-65	A/2854968.1	EST_HUMAN	gi 460141 Saccare_japonica_809 Hypothetical protein saccare_japonica_809 IMAGE:1881800_3	
1062	10978	20022	1.88	4.0E-65	4826725	NT	Homo sapiens fragile X mental retardation autosomal homolog (FMR1), mRNA	
1470	11376	21240	8.38	4.0E-65	4506636	NT	Homo sapiens ribosomal protein L34 (RPL34), mRNA	
2288	12171	22083	1.03	4.0E-65	BE221065.1	EST_HUMAN	gi 256041 NC_01 Cgarp_Mat5 Homo_sapiens_cDNA_clone IMAGE:3711102_3	
2288	12171	22086	1.03	4.0E-65	BE221065.1	EST_HUMAN	gi 256041 NC_01 Cgarp_Mat5 Homo_sapiens_cDNA_clone IMAGE:3711102_3	
5138	15005	24775	0.95	4.0E-65	9055969	NT	Homo sapiens low density lipoprotein receptor related protein delayed protein-delayed in tumor (LRPDIT), mRNA	
5138	15005	24776	0.95	4.0E-65	9055969	NT	Homo sapiens low density lipoprotein receptor related protein delayed protein-delayed in tumor (LRPDIT), mRNA	
5740	15648	25754	5.93	4.0E-65	A/B033098.1	NT	Homo sapiens mRNA for KIAA1257 protein, partial cds	
5740	15648	25755	3.83	4.0E-65	A/B033098.1	NT	Homo sapiens mRNA for KIAA1257 protein, partial cds	
6285	19149	28304	2.29	4.0E-65	11545780	NT	Homo sapiens hypothetical protein FL222087, mRNA	
8020	17870		2.17	4.0E-65	A/2277546.2	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor	
8448	18320	26570	7.47	4.0E-65	A/F118846.1	NT	Homo sapiens PRO1474 mRNA, complete cds	
8471	18978	20322	1.54	4.0E-65	4826725	NT	Homo sapiens fragile X mental retardation autosomal homolog 1 (FMR1), mRNA	
8975	18434	25152	1.98	4.0E-65	11450460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA	
1212	12646		5.37	3.0E-65	X/88632.1	NT	H-sapiens H2fz mRNA for zinc finger protein	
1780	21557		1.14	3.0E-65	A/000862.1	EST_HUMAN	gi 26151 Scarese, testis, NT Homo sapiens cDNA clone IMAGE:1638173_3 similar to contains element MSR1 repetitive element;	
3239	15162	22862	1.59	3.0E-65	4549450	NT	Homo sapiens laminin beta 1 (LAM1), mRNA	
3471	18978	20322	1.54	4.0E-65	4826725	NT	Homo sapiens fragile X mental retardation autosomal homolog 1 (FMR1), mRNA	
3680	15374	23381	0.98	3.0E-65	A/00082.1	EST_HUMAN	MSR1 repetitive element;	
4851	14444	24228	1.41	3.0E-65	69/2385	NT	Homo sapiens rab GTPase activating protein (GAP and centrosome-associated) (GAPCENA), mRNA	
7783	17653	27676	1.43	3.0E-65	BE73766.1	EST_HUMAN	gi 1766867 NH_1 MGC_60 Homo sapiens cDNA clone IMAGE:382305_5	

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 Table 4
 Single Exon Probes Expressed in Heart

Probe Seq ID No:	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal	Most Similar BLAST E Value	(Top EST) Hit No.	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8603	17877	2819	9.69	3.0E-65	AA430005.1	EST_HUMAN	zv65a0611 Scores: testis, NHT Homo sapiens cDNA clone IMAGE:781042 5'	
3389	13277	23078	5.27	2.0E-45	B10680294.1	EST_HUMAN	602150002f1 NIH_MCG_56 Homo sapiens cDNA clone IMAGE:3286900 5'	
5959	15843		4.55	2.0E-65	B26263937.1	EST_HUMAN	601190835f1 NIH_MCG_7 Homo sapiens cDNA clone IMAGE:3534741 5'	
6233	16099	29247	28.12	1.0E-45	B176221.1	EST_HUMAN	60213439f1 NIH_MCG_81 Homo sapiens cDNA clone IMAGE:3286265 5'	
7133	17010	27203	1.27	2.0E-65	AK024463.1	NT	Homo sapiens mRNA for FLJ00056 protein; partial cds	
7133	17010	27203	1.27	2.0E-65	AK024463.1	NT	Homo sapiens SWNS/MIF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3 (SMARCA3), mRNA	
8648	17849	28169	2.85	2.0E-65		114162427 NT		ES (178755) Coder/sachroma (HCG) cest in the Homo sapiens DNA 5' end similar to endogenous retrovirus
9109	18874		4.15	2.0E-65	AA307904.1	EST_HUMAN	601185403f1 NIH_MCG_57 Homo sapiens cDNA clone IMAGE:4023568 5'	
9250	19504		2.37	2.0E-65	B2450865.1	EST_HUMAN	60117034488f1 NIH_MCG_20 Homo sapiens cDNA clone IMAGE:4025801 5'	
85	10669		1.06	1.0E-65	B125544.1	EST_HUMAN	60117034488f1 NIH_MCG_21 Homo sapiens cDNA clone IMAGE:4025801 5'	
528	10470	20282	1.32	1.0E-35		NT	Homo sapiens putative Rnf107/Gtf2 exchange factor homologue (RASEF5), mRNA	
1994	11898		0.91	1.0E-65	AB040546.1	NT	Homo sapiens mRNA for KIAA1513 protein; partial cds	
3326	13240	23062	0.89	1.0E-65	BE440688.1	EST_HUMAN	hs22409.1x NCBI_GSAP_GCS Homo sapiens cDNA clone IMAGE:3208988 3'	
3917	13826	23500	2.13	1.0E-45		45040522 NT		Homo sapiens glycoprotein 4 (GP42) mRNA
3917	13826	23607	2.13	1.0E-45		45040522 NT		Homo sapiens glycoprotein 4 (GP42) mRNA
4112	14012	23769	2.37	1.0E-45	AV025940.1	EST_HUMAN	hs22608.1x NCBI_GSAP_GCS Homo sapiens cDNA clone IMAGE:2545152 3'	
4112	14012	23769	2.37	1.0E-65	AV025940.1	EST_HUMAN	hs22608.1x NCBI_GSAP_GCS Homo sapiens cDNA clone IMAGE:2545152 3'	
6802	16691	26970	1.58	1.0E-65	AV020481.1	EST_HUMAN	Q2-3T0298-140200-042-12 S70298 Homo sapiens cDNA	
6802	16691	26971	1.58	1.0E-65	AV020481.1	EST_HUMAN	Q2-3T0298-140200-042-12 S70298 Homo sapiens cDNA	
6802	16712	26914	2.36	1.0E-65	AV141259.1	EST_HUMAN	AL141259_Thrich Homo sapiens cDNA clone THRC010002955 6'	
6842	16721	26915	2.38	1.0E-65	AV141259.1	EST_HUMAN	AL141259_Thrich Homo sapiens cDNA clone THRC010002955 6'	
7152	17092	27291	1.76	1.0E-65	BF60807.1	EST_HUMAN	hs2136239f1 NIH_MCG_56 Homo sapiens cDNA clone IMAGE:4283313 5'	
7215	17092	27282	1.62	1.0E-65	AL120604.1	EST_HUMAN	AL120604 NT 27RP-Homo sapiens cDNA clone NT27RP2004747 4 5'	
7225	17092	27283	1.62	1.0E-65	AL120604.1	EST_HUMAN	AL120604 NT 27RP-Homo sapiens cDNA clone NT27RP2004747 4 5'	
7225	17099	2853	1.84	1.0E-65		11431944 NT		Homo sapiens insulin-like 1-type trypophosphate receptor type 1 (ITPR1), mRNA
7456	17285		6	1.0E-65	AI19716.1	EST_HUMAN	q656a02.1x Scores: testis, NHT Homo sapiens cDNA clone IMAGE:733450 3' similar to gba:M29581_2INC	
7687	17373	27763	1.25	1.0E-65	AI163795.1	EST_HUMAN	q6571362.1x NIH_B1(HUMAN)-contaminant MER1911 MER1911 repetitive element;	
8642	17393	28181	2.23	1.0E-65	AC26167.1	NT	Human telomeric factor 1 (TFA1) gene, complete cds	
8195	18046	28208	12.99	1.0E-65	4566800	NT	Homo sapiens ribosomal protein L7a (RPL7A) mRNA	
8473	18446	28610	2.18	1.0E-65	BF680707.1	EST_HUMAN	hs2136239f1 NIH_MCG_56 Homo sapiens cDNA clone IMAGE:4283313 5'	

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Probe SEQ ID NC:	Exon SEQ ID NC:	ORF SEQ ID NC:	Expression Signal Value	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
8542	18414	28681	2.35	1.0E-05	AL021017.1	EST_HUMAN	nt_767068_x1_NCL_CGA-T_G03 Homo sapiens cDNA clone IMAGE:22397170 3' similar to gbl:16553_m1	
9135	18005	2.27	1.0E-05	11419041	NT	Homo sapiens TNF-inducible protein CG12-1 mRNA	PANCREATITIS ASSOCIATED PROTEIN 1 PRECURSOR (HUMAN);	
9254	18953	25316	4.85	1.0E-05	11419232	NT	Homo sapiens cadherin EG-1 LIG superfamily member (CELSR1). mRNA	
9065	19226	1.44	1.0E-05	11419238	NT	Homo sapiens surface-area-related protein (SUL17Q). mRNA		
65	10051	18984	1.51	1.0E-06	AL160311.1	NT	Novel human gene mapping to chromosome 6p22	
1332	11259	21096	2.49	5.0E-06	5031980	NT	Homo sapiens 26S proteasome-associated part homolog (PDC11) mRNA	
6322	11258	21097	2.49	5.0E-06	5031980	NT	Homo sapiens 26S proteasome-associated part homolog (PDC11) mRNA	
1468	13773	4.18	5.0E-06	MS7259.1	NT	Human transposon element, partial		
3826	13738	28520	0.9	5.0E-06	MS7259.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2). mRNA, complete cds	
3826	13738	28530	0.9	5.0E-06	MS7259.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2). mRNA, complete cds	
4591	14479	24266	0.88	6.0E-06	AA242490.1	EST_HUMAN	zo200cd6.11 Scares, NHHMPu. S1 Homo sapiens cDNA clone IMAGE:767048.5	
6054	18443	1.73	7.0E-06	BE006440.1	EST_HUMAN	RC4-BT0311-141196-511-hg3 BT0311 Homo sapiens cDNA		
4290	14168	23944	1.22	6.0E-06	AL024683.1	EST_HUMAN	CE18896; wnt5707_x1_NCL_CGAP_Lut19 Homo sapiens cDNA clone IMAGE:24465697 3' similar to WPF1FGG9.4A	
4289	14168	23945	1.22	6.0E-06	AL024683.1	EST_HUMAN	CE18896; wnt5707_x1_NCL_CGAP_Lut19 Homo sapiens cDNA clone IMAGE:24465697 3' similar to WPF1FGG9.4A	
4286	14168	23846	1.22	6.0E-06	AL024683.1	EST_HUMAN	CE18896; wnt5707_x1_NCL_CGAP_Lut19 Homo sapiens cDNA clone IMAGE:24465697 3' similar to WPF1FGG9.4A	
8499	18572	28636	7.07	6.0E-06	XS9181.1	NT	H. sapiens mRNA for ribosomal protein L31	
1344	11250	21107	2.25	5.0E-06	BS005441.0	EST_HUMAN	RC4-BT0311-141199-011-hg3 BT0311 Homo sapiens cDNA	
7287	17225	27243	12.31	5.0E-06	11120567	NT	Homo sapiens thyroid hormone receptor binding protein (A/B3). mRNA	
773	10103	20512	0.75	4.0E-06	60778916	NT	Mus musculus fragile X mental retardation syndrome 1 homolog (Fmr1). mRNA	
2235	12120	22022	1.94	4.0E-06	X08211.1	NT	H. sapiens DNA for endogenous retroviral like element	
2425	12202	4.66	4.0E-06	AJ223394.1	NT	Homo sapiens germline DNA upstream of kappa locus		
4674	14550	5.15	4.0E-06	61535487	NT	Human endogenous retrovirus, complete genome		
5407	15226	28276	2.35	4.0E-06	11429893	NT	Homo sapiens methylene tetrahydrofolate dehydrogenase (NAD+-dependent), methenyltetrahydrofolate	
9512	15430	25454	1.78	4.0E-06	AV86116.1	EST_HUMAN	cytobiotinyltransferase (MTHFR2). mRNA	
0060	16106	24869	4.71	4.0E-06	AV1986572.1	EST_HUMAN	GVT-D70088-110200-061-910 DT0088 mRNA sequences, MAGI Homo sapiens cDNA	
6223	16098	26246	6.89	4.0E-06	U78168.1	NT	EST377524 IMAGE:24465697 3' similar to WPF1FGG9.4A	
0078	16388	23776	0.38	4.0E-06	11421659	NT	Homo sapiens hypothetical protein HJ20110 (HJ20110). mRNA	

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8052	71043	28183	1.96	4.0E-06	BF-507403.1	EST_HUMAN	UH-BW1-4me-a-10Q-U1.1 NCL-CGAP-Sub7 Homo sapiens cDNA clone IMAGE:3070473
1408	11313	21176	24.62	3.0E-06	45002068	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier, adenosine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
1408	11313	21176	24.62	3.0E-06	45002068	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier, adenosine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
1659	11834	21717	0.84	3.0E-06	N5523.1	EST_HUMAN	SW-HB21_TICCA-P35058 HISTONE H2B.1 (H2B.2, [2] PIR:BS5812;
1659	11834	21718	0.84	3.0E-06	N5523.1	EST_HUMAN	Y27121.1 Soares, multiple, adenosine, 2NtH H2B.1 (H2B.2, [2] PIR:BS5812;
1659	11834	21719	0.84	3.0E-06	N5523.1	EST_HUMAN	Y27121.1 Soares, multiple, adenosine, 2NtH H2B.1 (H2B.2, [2] PIR:BS5812); SW-HB21_TICCA-P35058 HISTONE H2B.1 (H2B.2, [2] PIR:BS5812);
2676	12540	22430	2.91	3.0E-06	11141880	NT	Homo sapiens TGFbeta-induced transcription factor 2 (TGIF2), mRNA
3076	13045	22797	5.47	3.0E-06	7655223	NT	Homo sapiens KIAA0646 product (KIAA0646), mRNA
6528	15445	15445	1.64	3.0E-06	11417046	NT	Homo sapiens NIPSNAP, C elegans, homolog (NIPSNAP), mRNA
6528	15445	22512	1.64	3.0E-06	11417046	NT	Homo sapiens NIPSNAP, C elegans, homolog (NIPSNAP), mRNA
8900	18814	28604	8.3	3.0E-06	5453949	NT	Homo sapiens protein phosphatase 2, regulatory subunit B, regulatory subunit B (PP2R2B), mRNA
45	10033	19857	1.02	2.0E-06	7655734	NT	Homo sapiens Msh5bp/NK-related finesse (MINK), mRNA
45	10033	19858	1.02	2.0E-06	7655734	NT	Homo sapiens Msh5bp/NK-related finesse (MINK), mRNA
416	9883	19774	0.93	2.0E-06	4505504	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L), mRNA, and translated products
416	9883	19775	0.93	2.0E-06	4505504	NT	Homo sapiens chromonome 21 segment HS2/ZTC101
1784	11812	21580	2.02	2.0E-06	AJ165301.2	NT	H. sapiens pseudogene for the low affinity Ig receptor
294	<2871	22696	0.96	2.0E-06	0858461	NT	Homo sapiens solute/cation exchanger I (form NaCa3 (NCX3)), mRNA, complete cds
3975	3882	24857	0.96	2.0E-06	AJ108398.1	NT	Homo sapiens H1-A-B gene for human leucocyte antigen B
4556	14448	24233	12.69	2.0E-06	AJ132587.2	NT	Homo sapiens H1-A-B gene for human leucocyte antigen B
4556	14448	24234	12.69	2.0E-06	AJ132587.2	NT	Y27121.1 Soares, multiple, adenosine, 2NtH H2B.1 (H2B.2, [2] PIR:BS5812);
7135	17012	21205	2.16	2.0E-06	N46490.1	EST_HUMAN	Y27121.1 Soares, multiple, adenosine, 2NtH H2B.1 (H2B.2, [2] PIR:BS5812);
9475	19112	22781	2.22	2.0E-06	11415181	NT	Homo sapiens G2-like S-phase expressed 1 (GTSF1), mRNA
2884	12792	22686	1.38	1.0E-06	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DGBADCD07 5'
2884	12792	22689	1.38	1.0E-06	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DGBADCD07 5'
4238	<2192	22585	3.26	1.0E-06	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DGBADCD07 5'

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Probe	Exon	Top Hit	Top Hit Description		
SEQ ID NO:	ORF SEQ ID NO:	Most Similar Expression Signal	(Top) Ht. Value	Top Hit Assession No.	Top Hit Database Source
6306	15227	28531	5.36	1.0E-67	BB5750B08K.1 EST_HUMAN
6143	15867	28510	1.49	1.0E-66	BB5290S08K.1 EST_HUMAN
68226	18804	285948	1.37	1.0E-66	AA658858K.1 EST_HUMAN
8312	18186	28448	2.39	1.0E-66	AFF11167.2 NT
8260	18655		2.05	9.0E-67	Homo sapiens Iun dimerization protein gene, partial cds; ciso gene, complete cds; and unknown gene EST0760 Subtracted cDNA library [cat. #E07602] Homo sapiens cDNA clone IMAGE-HCfPN31
48230	147111		0.84	8.0E-67	NEL158.1 EST_HUMAN
378	10390	20184	8.19	7.0E-67	AW162232.1 EST_HUMAN
1360	11288	21122	2.63	7.0E-67	AA89346.1 EST_HUMAN
1535	11439	21240	1	7.0E-67	W5947.1 EST_HUMAN
1535	11439	21257	1	7.0E-67	W5947.1 EST_HUMAN
1888	11881	21773	1.08	7.0E-67	W65743.NT Homo sapiens insol. 3'-A-phosphoglycerate kinase (TPK1). mRNA
1888	11881	21774	1.08	7.0E-67	W657243.NT Homo sapiens insol. 3'-A-phosphoglycerate kinase (TPK1). mRNA
2776	10390	20184	7.07	7.0E-67	AW162232.1 EST_HUMAN
5793	15867	285087	2.04	7.0E-67	11428572.NT Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP-2B1). mRNA
6793	15869	285088	2.04	7.0E-67	11428572.NT Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP-2B1). mRNA
6939	18829	289111	1.66	7.0E-67	11430460.NT Homo sapiens low density lipoprotein receptor-related protein 2 (LRP2). mRNA
9039	18829	289112	1.56	7.0E-67	11430460.NT Homo sapiens low density lipoprotein receptor-related protein 2 (LRP2). mRNA
9501	16116	285202	3.33	7.0E-67	AB011359.1 EST_HUMAN
9888	1537	10488	1.43	7.0E-67	11421527.NT Homo sapiens sigma-1 receptor, voltage-dependent, brain 2nd messenger system: 1 (GACNA2D1), mRNA
647	10488	20287	1.32	6.0E-67	X68608.1 NT
778	10708	205047	1.5	6.0E-67	2172207.1 NT
1252	11166	210068	0.93	6.0E-67	Y14320.1 NT
3131	13056	22856	1.24	6.0E-67	45004544.NT Homo sapiens reelin-binding protein 1 (including reelincoreme) (RB1) mRNA
3391	13209	22106	1.2	6.0E-67	4502322.NT Homo sapiens Sustained III (SYN2) mRNA, and translated products
3391	13208	22107	1.2	6.0E-67	4502323.NT Homo sapiens Synapsin III (SYN3) mRNA, and translated products
40356	13538	237116	1.29	6.0E-67	AL165201.2 NT
44067	144865	242433	3.37	6.0E-67	7657020.NT Homo sapiens chromosome 21 segment HS.21.C001
44067	144865	242434	3.37	6.0E-67	7657021.NT Homo sapiens chromosome 21 segment (DK-2p24.2p21.1), mRNA

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal Value	Most Similar BLAST Hit Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
5125 14761	13109	22913	2.1	6.0E-67	AF000560.1	NT	Human exons ubiquitin specific protease 13 [isopropylidene T-3] (USP13) mRNA Homo sapiens T cell receptor beta locus, TCRBV1/252.2 region	
3184 18229			2.45	5.0E-67	PMS-B716-[00400-001-001] B10/76 Homo sapiens cDNA	EST_HUMAN		
1306 11211	21066		1.83	4.0E-67	56e0816.1	NT	Yn021111_Swine cell line 1234-15577_5311_H70534_Homo sapiens cDNA clone IMAGE:1612533 5'	
6853 19702			1.22	4.0E-67	Bf357321.1	EST_HUMAN	TCOH-T0934-[15000-025-03] H70534_Homo sapiens cDNA	
8416 18290	20365		2.3	4.0E-67	AA714294.1	EST_HUMAN	Imw0601_51_NCI_C6AP_5311_Homo sapiens cDNA clone IMAGE:1238472 3 similar to TR O10385 O10385	
2782 13224	20198		0.63	3.0E-67	AA353708.1	EST_HUMAN	PRO-POL-DUTASE POL PROTEIN; RCA-B-T0314-[41198-01-00] B10/311_Homo sapiens cDNA	
3407 14484	24270		1.14	3.0E-67	EE506440.1	EST_HUMAN	RPS-N3N008-[04050-006-001] SW0085_Homo sapiens cDNA	
6760 16636	26827		1.22	3.0E-67	Bf160088.1	EST_HUMAN	hr1605_x_NCL_GCAP_Lcgt11_Homo sapiens cDNA clone IMAGE:3134613 3 similar to SW_RHOP_MOUSE	
8853 18451			19.27	3.0E-67	AA227614.1	EST_HUMAN	G61085_GTP-Rlo BINDING PROTEIN 1; omtBk07_51_Scares_NFL_T_GBC_S1_Homo sapiens cDNA clone IMAGE:3005078 5' similar to TR_O04862 OG4862	
180 10162	19897		1.94	2.0E-67	EE34834.1	EST_HUMAN	hr18g00_x_NCL_GCAP_Luc24_Homo sapiens cDNA clone IMAGE:3183136 3' similar to WPj-F23H11_9_CEE0677;	
8277 10754	20804		6	1.74	2.0E-67	AV181605.1	EST_HUMAN	CIV-S70234-[181605-007-005] ST10254_Homo sapiens cDNA
1089 11005				NT			Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exons 2a-2, 3 and 4 hr1705_y1_NHL_MGIC_20_Homo sapiens cDNA clone IMAGE:2005678 5' similar to TR_O04862 OG4862	
1841 11737	21614		1.5	2.0E-67	BE305037.1	EST_HUMAN	KIAA0784 PROTEIN; KIAA0784_1	
1841 11737	21615		1.5	2.0E-67	BE305037.1	EST_HUMAN	baf7295_y1_NHL_MGIC_20_Homo sapiens cDNA clone IMAGE:2005078 5' similar to TR_O04862 OG4862	
2339 12216	22116		0.98	2.0E-67	F300561.1	NT	Home sapiens KRB4 zinc finger protein ZIF4R mRNA, complete cds	
2381 12261	22153		1.2	2.0E-67	47556765	NT	Home sapiens kinase, finger-like, NTF_Homo sapiens cDNA clone IMAGE:453922 3'	
3422 15359	23144		3.9	2.0E-67	AA22765.1	EST_HUMAN	hr19g15_1_Scares_leucine_NTF_Homo sapiens cDNA clone IMAGE:453921 3'	
3821 13830	28670		2.33	2.0E-67	AL161300.2	NT	Home sapiens chromosome 21 segment HS2C1_00	
5724 15631	25734		4.22	2.0E-67	BF242788.1	EST_HUMAN	60173381_F1_NHL_MGIC_55_Homo sapiens cDNA clone IMAGE:4051883 5'	
5803 15708	26820		2.17	2.0E-67	AB057783.1	NT	Home sapiens mRNA for NADPH-cytochrome P-450 reductase, complete cds	
5803 15708	26821		2.17	2.0E-67	AB057783.1	NT	Home sapiens mRNA for NADPH-cytochrome P-450 reductase, complete cds	
7202 17079			1.34	2.0E-67	AV1602353.1	EST_HUMAN	RCA-B-[0696-7010/01-007_B10/686_Homo sapiens cDNA	
7202 17079	27285		1.34	2.0E-67	AV1602353.1	EST_HUMAN	RCA-B-[0696-7010/01-007_B10/686_Homo sapiens cDNA	
8409 19769			3.26	2.0E-67	1143646	NT	Home sapiens KIAA0956 protein (KIAA0956)_mRNA	
8558 18248	28958		1.77	2.0E-67	HE256714.1	EST_HUMAN	601175762CF1_NHL_MGIC_17_Homo sapiens cDNA clone IMAGE:3531038 5'	
8751 17900	28144		2.26	2.0E-67	BF371168.1	EST_HUMAN	PAZ1-[1NN105-04050-007_TN0105_Homo sapiens cDNA	
9385 19377			2.8	2.0E-67	11415166	NT	Home sapiens thyroid autoantigen TGD (ku antigen) (G22P1)_mRNA	

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
253	10219	20393	4.37	1.0E-67	4502166 NT	Hom sapiens amyloid beta (A4) precursor protein (protease neustein), Alzheimer disease (APP), mRNA	
2129	12077	21915	2.46	8.1E-68	EE870732.1	ENI_MGC_65 Hom sapiens cDNA clone IMAGE:3852256 5'	
3794	13706	23492	4.06	8.0E-08	AV209456.1	EST_HUMAN	[AF221107] Strategene heart neuron (#607238) Homo sapiens cDNA clone IMAGE:6481 03 5' similar to SWI/SV/SV/SV/LACAC 02/790 SAV PROTEIN;
3794	13706	23493	4.96	8.0E-08	AA209455.1	EST_HUMAN	[AF221107] Strategene heart neuron (#607238) Homo sapiens cDNA clone IMAGE:6481 03 5' similar to SWI/SV/SV/SV/LACAC 02/790 SAV PROTEIN;
146	11745	222	6.1E-56	AIW509482.1	EST_HUMAN	UHR-BNP-36-0-247U NIH MGC_100 Hom sapiens cDNA clone IMAGE:3078224 5'	
7971	17821	28054	2.46	6.1E-55	-114222965 NT	Hom sapiens brachyury (Activating gene 2 nucleotide exchange protein 2 (BNC2)) and later inhibitory receptor 2-2-2 (KR222) genes, partial cds	
8486	18382	28227	1.63	6.0E-48	AF138901.1	NT	Hom sapiens killer inhibitory receptor 2-2-1 (KR221) and later inhibitory receptor 2-2-2 (KR222) genes,
9876	18234		1.42	6.0E-58	EE612564.1	EST_HUMAN	EE612567 FFI NIH MGC_86 Hom sapiens cDNA clone IMAGE:3855761 5'
9616	18391	25178	1.36	6.1E-56	BF010875.1	EST_HUMAN	BF0108646352 F2 NIH MGC_19 Hom sapiens cDNA clone IMAGE:4124144 5'
785	12842	20955	0.87	5.0E-46	AF2510161	NT	Hom sapiens chromosome 21 unknown mRNA
785	12842	20556	0.87	5.0E-68	AF2319161	NT	Hom sapiens chromosome 21 unknown mRNA
802	10731	20572	3.87	5.0E-68	AF2319161	NT	Hom sapiens chromosome 21 unknown mRNA
802	10731	20573	3.87	5.0E-68	AF2319161	NT	Hom sapiens chromosome 21 unknown mRNA
3108	13934	22893	2.02	5.0E-46	AB037085.2	NT	Hom sapiens mRNA for KIAA1631 protein, partial cds
2480	12356	22247	1.01	4.0E-68	-11421388 NT	Hom sapiens transcription factor NTF (NTF), mRNA	
4000	14780	22248	1.01	4.0E-68	11421388 NT	Hom sapiens transcription factor NTF (NTF), mRNA	
6051	16044	26188	5.64	4.0E-68	SWISSPROT	GLYCERALDEHYDE-3-PHOSPHATE DEHYDROGENASE (LIVER)	
6051	16044	26189	5.64	4.0E-68	11059909 NT	Hom sapiens serine carboxypeptidase 1 precursor protein (HSCP1), mRNA	
6051	16044	26189	5.64	4.0E-68	11059909 NT	Hom sapiens serine carboxypeptidase 1 precursor protein (HSCP1), mRNA	
7225	17102	27290	5.41	4.0E-68	-1265479.2	NT	Hom sapiens mRNA for KIAA0145 protein, partial cds
7225	17102	27291	5.41	4.0E-68	1263479.2	NT	Hom sapiens mRNA for KIAA0145 protein, partial cds
7225	17102	27371	2.39	4.0E-68	AB040401.1	NT	Hom sapiens mRNA for KIAA1685 protein, partial cds
3611	13825	23112	5.61	3.0E-68	AF2362082.1	NT	Mus musculus G-protein coupled receptor GPR73 (Gαo73) mRNA, complete cds
7441	16454		4.44	3.0E-68	-13452323.1	EST_HUMAN	G15N02-X1 Scores: fetal lung, NHHL 19% Hom sapiens cDNA clone IMAGE:19820291 3' similar to contaminant
7897	17887	28088	1.45	3.0E-68	F28784.1	EST_HUMAN	THR12 THR18 FRIK mRNA, partial cds
9872	19502		1.53	3.0E-48	AW339485.1	EST_HUMAN	QV1-DT010120-0086-106 D070720-Homo sapiens cDNA Cricetulus longicaudatus mRNA for EF-1 epsilon, complete cds
2832	15076		12.26	2.0E-68	D00522.1	NT	Cricetulus longicaudatus mRNA for EF-1 epsilon, complete cds
4553	14473	24291	1.05	2.0E-68	AB008881.1	NT	Hom sapiens gene for actinin repeat-type 1B, complete cds
6110	15004		8	2.0E-68	R45988.1	EST_HUMAN	yabg04 at Source infant brain TIB-Homo sapiens cDNA clone IMAGE:346963 3'

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Probe Seq ID No.	Exon ORF Seq ID No.	Top Hit Expression Signal Source	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
62022 15602	20056	4.79	2.0E-46	EF033316.1	EST_HUMAN	Homo sapiens integrin alpha 10 subunit (disulfonated in balanced translocation) 1 (MAN1). mRNA
9148 19731		1.92	2.0E-46	EF037376.1	EST_HUMAN	Q04-S10234-81198-037-510234 Homo sapiens cDNA clone IMAGE:38622034.5
72 10066	18873	1.31	1.0E-48	EF033316.1	EST_HUMAN	Q04-S10234-81198-037-510234 Homo sapiens cDNA clone IMAGE:38622032.5
283 10267	20076	9.36	1.0E-68	AV016405.1	EST_HUMAN	Homo sapiens integrin alpha 10 subunit (disulfonated in balanced translocation) 1 (MAN1). mRNA
2205 12092	21694	1.32	1.0E-68	AB011149.	NT	Homo sapiens cDNA for KIAA0575 protein, complete cds
2205 12092	21695	1.32	1.0E-68	AB011149.1	EST_HUMAN	Homo sapiens cDNA for KIAA0575 protein, complete cds
2728 12890	22486	1.01	1.0E-68	AV016405.1	EST_HUMAN	UH1713-alk-501-04-U1-s1 NCI CGAP_S2S Homo sapiens cDNA clone IMAGE:27372273
3228 13837	23617	0.95	1.0E-68	EF036032.1	EST_HUMAN	UH1717-0022F1 NIH_3T3_Homo sapiens cDNA clone IMAGE:3832344.5
4959 14831	24593	0.98	1.0E-68	AA097343.1	EST_HUMAN	UH1712-2-1_Susceu_107_1_G3C_S1_Homo sapiens cDNA clone IMAGE:440518.3
5261 15163	24959	1.57	1.0E-68	7002349.NT	EST_HUMAN	Homo sapiens cDNA recognition molecule Cest2 (KIAA0889). mRNA
8228 18108	28351	2.44	1.0E-68	11419569.NT	EST_HUMAN	Homo sapiens phosphodiesterase 7B (PDE7B). mRNA
8228 18108	28352	2.44	1.0E-68	11419569.NT	EST_HUMAN	Homo sapiens phosphodiesterase 7B (PDE7B). mRNA
8275 18155	28396	2.26	1.0E-68	7861.6.1	NT	Homo sapiens NR2B2 suppressor (NSM13). mRNA, complete cds
9856 10056	19873	1.65	1.0E-68	4592222.NT	EST_HUMAN	Homo sapiens cDNA for Igf1 (disulfonated in balanced translocation) 1 (MAN1). mRNA
9856 19898	24891	1.38	1.0E-68	11430460.NT	EST_HUMAN	Homo sapiens cDNA for Igf1 (disulfonated in balanced translocation) 1 (MAN1). mRNA
19 10008	19797	1.82	9.0E-69	503.976.NT	EST_HUMAN	Homo sapiens pre-B-cell colony-enhancing factor (PBEF). mRNA
19 10008	19798	1.82	9.0E-69	503.976.NT	EST_HUMAN	Homo sapiens pre-B-cell colony-enhancing factor (PBEF). mRNA
1011 10629	20772	1.63	9.0E-69	503.980.NT	EST_HUMAN	Homo sapiens 26S proteasome-associated nucleophilic homolog (P-1). mRNA
1011 10629	20773	1.63	9.0E-69	503.980.NT	EST_HUMAN	Homo sapiens 26S proteasome-associated nucleophilic homolog (P-1). mRNA
4037 13840	23718	0.78	9.0E-69	4757.997.NT	EST_HUMAN	Homo sapiens viral murine sarcoma virus oncogene homolog B1 (BRAF). mRNA
6223 18145		9.27	9.0E-69	AU11724_HENNA_Homo sapiens cDNA clone HE/NBA/1000985.5	EST_HUMAN	AU11724_HENNA_Homo sapiens cDNA clone HE/NBA/1000985.5
3340 13280		1.21	8.0E-69	AL237744.1	EST_HUMAN	Homo sapiens Russell's rat tail fibroblast, exon 12
5334 15740	28552	6.09	7.0E-69	9606612.NT	EST_HUMAN	Q04-S10234-81198-037-510234 Homo sapiens cDNA clone IMAGE:17430013 similar to gba1.1.x1 Scaree fetal lung_NFL-18W Homo sapiens cDNA clone IMAGE:17430013 similar to gba1.1.x1 Scaree fetal lung_NFL-18 (HUMAN).
6659 18468	20659	3.61	6.0E-69	A1027764.1	EST_HUMAN	Q04-S10234-81198-037-510234 Homo sapiens cDNA clone IMAGE:17430013 similar to gba1.1.x1 Scaree fetal lung_NFL-18W Homo sapiens cDNA clone IMAGE:17430013 similar to gba1.1.x1 Scaree fetal lung_NFL-18 (HUMAN).
6659 18469	20660	3.61	6.0E-69	A1027764.1	EST_HUMAN	Q04-S10234-81198-037-510234 Homo sapiens cDNA clone IMAGE:17430013 similar to gba1.1.x1 Scaree fetal lung_NFL-18W Homo sapiens cDNA clone IMAGE:17430013 similar to gba1.1.x1 Scaree fetal lung_NFL-18 (HUMAN).
6656 15481	25554	4.12	4.0E-69	AT724073.1	EST_HUMAN	WIF5/B06_X1_NCI CGAP_S2S Homo sapiens cDNA clone IMAGE:2394619.3 similar to TR-056137
5905 15800	20224	2.43	4.0E-69	4557.732.NT	EST_HUMAN	G65137 ACV1 COA THIOPURINE-ESTERASE;
5905 15800	20225	2.43	4.0E-69	4557.732.NT	EST_HUMAN	Homo sapiens latent transforming growth factor beta binding protein 2 (L(BP2)) mRNA
360 10384	20187	2.81	3.0E-69	BE256012.1	EST_HUMAN	60111037.F1 NIH_3T3_Homo sapiens cDNA clone IMAGE:3351362.5
360 10532	20340	1.64	3.0E-69	AF221712.1	NT	Homo sapiens Shn1 and Olf-interacting zinc finger protein mRNA, partial cds

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal Value	Most Similar (Top) BLAST-E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1538 11440			0.85	3.0E-59	780514.1	EST_HUMAN	y018ad11.2 Scores: infant brain cDNA clone IMAGE:24850 5' similar to SP-A455316
2325 12206			0.86	3.0E-59	572909.1	EST_HUMAN	A48302 SPEGF III(E)-REPET-CONTAINING FIBROBLAST-LIKE PROTEIN - SEA URCHIN :
3590 13697	28074		0.86	3.0E-59	A170588B.1	EST_HUMAN	Hom sapiens synaptosomal vesicular endo-pherelin receptor 1 (LYVE-1) mRNA
5209 15087	28105		5.94	3.0E-59	11419185.1	EST_HUMAN	Homo sapiens acetyltransferase 1, mitochondrial (ACO2), mRNA
6387 16249	28410		1.37	3.0E-59	U52351.1	NT	Homo sapiens amn-reapet protein NRP1/Phosphatidylserine-binding protein (CTNNB2) mRNA, partial cds
6457 16518	28485		8.43	3.0E-59	11419186.1	EST_HUMAN	Homo sapiens TRAF-binding protein 1 (SP1) mRNA, complete cds
709 16568			1.26	3.0E-59	A0A260V751.1	EST_HUMAN	EST-B68071/NSC172 cells II Homo sapiens cDNA 5' end similar to fibronectin protein S18
7417 17284	27491		1.54	3.0E-59	X13223.1	NT	H-sapiens mRNA for N-acetylgalactosaminide (beta-1->3)fucosyltransferase
7468 17663	27668		2.24	3.0E-59	X06233.1	NT	H-sapiens mRNA for calcium-binding protein in macrophages (MRP-14) macrophage migration inhibitory factor
8036 18069	28128	28174	3.97	3.0E-59	11432120.1	EST_HUMAN	I: Homo sapiens obscurum protein S15a (RPS15A). mRNA
9168 18811			4.13	3.0E-59	11419187.1	EST_HUMAN	I: Homo sapiens HCG20 protein (HCG20). mRNA
124 10344	20170		1	3.0E-59	AF160252.1	NT	Hom sapiens KIAA0563 protein gene, complete cds, and alpha/beta protein gene, partial cds
124 10344	20170		1	3.0E-59	AF160252.1	NT	Hom sapiens KIAA0563 protein gene, complete cds, and alpha/beta protein gene, partial cds
366 10344	20170		4.94	3.0E-59	AF160252.1	NT	Hom sapiens KIAA0563 protein gene, complete cds, and alpha/beta protein gene, partial cds
398 10344	20171		4.94	3.0E-59	AF160252.1	NT	Hom sapiens KIAA0563 protein gene, complete cds, and alpha/beta protein gene, partial cds
1842 11738	21616		1.2	3.0E-59	B0257857.1	EST_HUMAN	60110644-4/F NIH-3T3/MC-10/Homo sapiens cDNA clone IMAGE:3390074.6 /n71902.1 Scores: best, NIH_Homo sapiens cDNA clone IMAGE:781682.5
2813 12742			2.73	2.0E-60	AA31167.1	EST_HUMAN	Rattus norvegicus brain-specific contactin-binding protein CBP90 mRNA, partial cds
1975 11577	21445		2.35	1.0E-60	AF052768.1	NT	Q19710/p10-03199-045-007 T10010 Homo sapiens cDNA
5081 15898	28008		3.68	1.0E-60	AK353061.1	EST_HUMAN	Hom sapiens KIAA0776 gene product (KIAA0776). mRNA
6090 16003	28211		1.55	1.0E-60	7002239.1	EST_HUMAN	Hom sapiens KIAA0776 gene product (KIAA0776). mRNA
6090 16003	28212		1.56	1.0E-60	7002238.1	EST_HUMAN	Hom sapiens mRNA for KIAA1147 protein, partial cds
6098 16033	28173		2.93	1.0E-60	AB032973.1	NT	Hom sapiens mRNA for KIAA1147 protein, partial cds
7847 17697	28194		6.29	1.0E-60	BE245670.1	EST_HUMAN	TCBAP12678 Predicted pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA_Homo sapiens cDNA clone TCBAP12678
7847 17697	27943		5.29	1.0E-60	BE245670.1	EST_HUMAN	TCBAP12678 Predictive pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA_Homo sapiens cDNA clone TCBAP12678
8246 18126			23.27	1.0E-60	45D9R8.1	NT	Hom sapiens Keratin 8 (KRT8) mRNA
9105 18572	28705		1.53	1.0E-60	BF125687.1	EST_HUMAN	60110650-1/NHL-MGC_20/Homo sapiens cDNA clone IMAGE:40125755.5

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
<i>Wif4e08_x1_Scans.NFL_T_GCB_S1</i> Homo sapiens cDNA clone MAGE-2380390 3 similar to contains AU repetitive element containing element MIR precursor element;							
9510	19124		2.32	1.0E-39	AB096964.1	EST_HUMAN	nc_3d12.1_Homo sapiens cDNA clone MAGE-1008023
2284	12717	22095	1.52	8.0E-10	AAB230303.1	EST_HUMAN	nc_3d12.1_Homo sapiens cDNA clone MAGE-1008023
4277	14176	23954	2.16	6.0E-10	L77966.1	NT	Homo sapiens DSS-1 mRNA 3' end
1771	11670	21547	1.93	7.0E-10	AH97807.1	EST_HUMAN	nt_mir010_x1_HCI_CGAP_Bm5_Homo sapiens cDNA clone MAGE-2168505 3'
1688	11784	21680	1.63	7.0E-10	AA282955.1	EST_HUMAN	nt_mir010_x1_NOL_CGAP_SCG81_Homo sapiens cDNA clone MAGE-2168505 3'
2018	11509		3.57	7.0E-10	AB032955.1	EST_HUMAN	nt_mir010_x1_NOL_CGAP_SCG81_Homo sapiens cDNA clone MAGE-2168505 3'
4112	14032	23907	3.85	7.0E-10	4757723	NT	Homo sapiens tumor suppressor deleted in oral cancer-related (DOC-R) mRNA
6369	15285	26124	5.28	7.0E-10	AB032369.1	NT	Homo sapiens MIS mRNA, partial cds
5369	16269	26125	6.28	7.0E-10	AB032369.1	NT	Homo sapiens MIS mRNA, partial cds
6158	15985	28120	1.89	7.0E-10	AJ000002.1	NT	Homo sapiens gene encoding splicing factor SF1, exons 2-8
6910	16788	26980	2.36	7.0E-10	AB037715.1	NT	Homo sapiens mRNA for KIAA2364 protein, partial cds
6910	16788	26981	2.36	7.0E-10	AB037715.1	NT	Homo sapiens mRNA for KIAA2364 protein, partial cds
7033	16940	27131	3.98	7.0E-10	M74094.1	NT	Human displacement protein (CCNA1) mRNA
7033	16940	27132	3.98	7.0E-10	M74094.1	NT	Human displacement protein (CCNA1) mRNA
7283	17150	27357	3.72	7.0E-10	X59844.1	NT	Human PBX3 mRNA
7283	17159	27358	3.72	7.0E-10	X59844.1	NT	Human PBX3 mRNA
7438	16441	26627	3.13	7.0E-10	AF35715.1	NT	Homo sapiens phosphatidyl scramblase 1 gene, exon 1 and 5 flanking region
7445	16457	26648	1.56	7.0E-10	11526594	NT	Homo sapiens karyopherin beta 2b, transportin (TRN2), mRNA
7445	16457	26649	1.56	7.0E-10	11526594	NT	Homo sapiens karyopherin beta 2b, transportin (TRN2), mRNA
8875	18687	26978	1.78	7.0E-10	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S, cerevisiae) homolog d (Hira), mRNA
8875	18687	26979	1.78	7.0E-10	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S, cerevisiae) homolog d (Hira), mRNA
883	10780	20630	1.93	6.0E-70	MA09638.1	NT	Homo sapiens amyloid beta (A4) precursor protein (protease inhibitor, Alzheimer disease) (APP), mRNA
2050	11273	21874	1.36	6.0E-70	MA09638.1	NT	Homo sapiens amyloid beta (A4) precursor protein (protease inhibitor, Alzheimer disease) (APP), mRNA
2461	12378	22232	0.99	6.0E-70	892859	NT	Homo sapiens CAMP-N-acetyltransferable acidic sulfate ester sulfate (LOC55977), mRNA
2505	12123	22268	1.83	5.0E-70	7882307	NT	Homo sapiens KIAA0762 gene product (KIAA0762), mRNA
9116	16879	22289	1.73	5.0E-70	BE169034.1	EST_HUMAN	MR3-1T0467-15202-11-a06 HT0467 Homo sapiens cDNA
1571	11475	21332	0.89	3.0E-70	BE171798.1	EST_HUMAN	RCGBIT052-2-07259-01-a12 BT05222 Homo sapiens cDNA
1571	11475	21333	0.89	3.0E-70	BE071798.1	EST_HUMAN	RCGBIT052-2-07259-01-a12 BT05222 Homo sapiens cDNA

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Probe SEQ ID NO.	Exon ORF SEQ ID NO:	Top Hit BLAST E Value	Most Similar Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
5845 15751	268865	3.88	3.0E-70 BF685293.1	EST_HUMAN	IMAGE:4302808_5	
5845 15751	268866	3.88	3.0E-70 BF685293.1	EST_HUMAN	IMAGE:4302805_5	
674	10608	20426	13.15	2.0E-70 NC_0161.1	EST_HUMAN	
674	10508	20427	13.15	2.0E-70 NC_0161.1	EST_HUMAN	
689	10822	20449	2.01	2.0E-70 AL248699.1	EST_HUMAN	
1004	10822	20756	1.7	2.0E-70	8023669_NT	
1167	11079	20924	1.95	2.0E-70	7001923_NT	
1167	11079	20925	1.95	2.0E-70 BE47311.2	EST_HUMAN	
1387	11202	21148	0.97	2.0E-70 AL1652022.2	NT	
1708	11609	21479	2.09	2.0E-70	HS21_0002	
2272	12158		3.62	2.0E-70 AA054010.1	EST_HUMAN	
3863	13370	23548	3.95	2.0E-70 NC_0161.1	NT	
5385 15304	25156	8.05	2.0E-70 X72852.1	NT	Homo sapiens gene for schwannomin (CSB)	
5385 15304	25157	8.05	2.0E-70 X72852.1	NT	H. sapiens gene for schwannomin (CSB)	
5788	15873	26730	1.42	1.0E-70 AF310105.1	NT	Homo sapiens NALP1 mRNA, complete cds
5909	15004	26023	1.88	2.0E-70 D12655.1	NT	Human mRNA for NF1 protein (neurofibromin) isoform, complete cds
6010	15975	26042	0.83	2.0E-70 AF1220174.1	NT	Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds
6010	15976	26043	0.83	2.0E-70 AF1220174.1	NT	Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds
6177	15134	24853	1.69	2.0E-70	11422862_NT	
6613	16995	28955	7.57	2.0E-70 M27141.1	NT	Human gamma m-nicotinamide-binding protein alpha-subunit gene (G- α -iphi), exons 7 and 8
7835	17985	27930	1.3	2.0E-70 AF123903.1	NT	Human gamma m-nicotinamide-binding protein alpha-subunit gene (G- α -iphi), exons 7 and 8
8422	18296	28560	3.19	2.0E-70	8023420_NT	
8422	18296	28560	3.19	2.0E-70	8023420_NT	
8908	18716	26010	5.82	2.0E-70	4653850_NT	
9492	19114	26230	2.58	2.0E-70	11435460_NT	
3347	13267		2.97	1.0E-70	4850476_NT	
7642	17492		2.57	1.0E-70 AAA44292.1	EST_HUMAN	
8305	18182	28429	13.73	1.0E-70 AV738598.1	EST_HUMAN	

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Probe SEQ ID NO.	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal Value	Most Similar BLAST1 E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5621	15536	28621	6.04	9.0E-71	AH3870.1	EST_HUMAN	cpd-0101.x1 Source: testis NIH3T3 clone IMAGE:1738009 3' similar to TR-014045
5621	15538	286522	6.04	9.0E-71	AH45970.1	EST_HUMAN	cpd-0101.x1 Source: testis NIH3T3 clone IMAGE:1738009 3' similar to TR-014045
6192	16077	26226	1.88	9.0E-71	AL064003.1	EST_HUMAN	CH160526.x1 PHOSPHOTRANSFERASE_1
6811	16077	26226	4.65	9.0E-71	AL064003.1	EST_HUMAN	CH160526.x1 NCL_CGP_GDP_Homo sapiens cDNA clone IMAGE:2308283 3' similar to TR-014045
7245	17122		1.97	8.0E-71	AA71481.1	EST_HUMAN	TR-G-149051 G11-3061 STRA8 X434-POL;
6363	16228	26336	7.91	7.0E-71	AA0442230.1	EST_HUMAN	ZD061096.1 Source: testis NIH3T3 clone IMAGE:758075 5'
7037	16614	27103	1.52	7.0E-71	AA705487.1	EST_HUMAN	ZD061096.1 Source: testis NIH3T3 clone IMAGE:758075 5'
8643	18607	28796	4.18	7.0E-71	AL165210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2163	12050	21061	3.45	5.0E-71	AF096322.1	EST_HUMAN	Homo sapiens SF100-HMG nuclear activator gene SP1/00 mRNA, complete cds
4030	13633	23710	1.38	5.0E-71	AWB16405.1	EST_HUMAN	Q19-S70234-18196-037-405 ST0234 Homo sapiens cDNA
5144	15011	24732	3.2	5.0E-71	AA20468.1	EST_HUMAN	with10.x1 NCL_CGP_U1 Homo sapiens cDNA clone IMAGE:2328316 3'
5585	15801	25571	2.14	5.0E-71	4502740	NT	Homo sapiens cyclin-dependent kinase 6 (CDK5) mRNA
6434	16398	28487	1.59	5.0E-71	NS105.1	NT	Human neurofibromatosis protein type 1 mRNA, 3' end of cds
6548	16406	285585	19.78	5.0E-71	AF072810.1	NT	Homo sapiens transcription factor VS1 mRNA, complete cds
7702	17552		2.26	5.0E-71	X13467.1	NT	Human PrkA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 2)
8346	18225	29417	1.9	5.0E-71	11429545	NT	Homo sapiens pro-Paladin basic protein (includes plakophilin basic protein, beta-thromboglobulin, connexine-achlafing peptide III, neofibroblast-specific peptide-2 (NPBP), RNA
8528	18400	28698	2	5.0E-71	11430569	NT	Homo sapiens similar to hyaluronidase protein FL220733 (H. saevanae) [LOC03325], mRNA
9067	18448	28116	1.84	5.0E-71	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0350), mRNA
9411	19163		1.62	5.0E-71	11410309	NT	Homo sapiens RNA binding motif protein 7 (FBM9), mRNA
97	101982	19819	1.13	4.0E-71	49051592	NT	Homo sapiens tumor necrosis factor (ligan) superfamily member 10 (TNFSF10) mRNA
347	10306	20123	15.53	4.0E-71	AF157628.1	NT	Equus caballus glycosaminoglycan-3-phosphotyrosine-3-phosphate dehydrogenase mRNA, partial cds
347	10306	20124	15.63	4.0E-71	AF157628.1	NT	Equus caballus glycosaminoglycan-3-phosphate dehydrogenase mRNA, partial cds
2850	12178	222695	0.88	4.0E-71	77054141	NT	Homo sapiens hook protein (HOOK1), mRNA
2850	12178	222697	0.88	4.0E-71	77054141	NT	Homo sapiens hook protein (HOOK1), mRNA
2857	12185	22537	1.63	4.0E-71	46505890	NT	Homo sapiens phosphoglycerate kinase (PG) mRNA
4913	14227	24019	3.35	4.0E-71	AF058322.1	NT	Homo sapiens SH100-HMG nuclear subunit interferon (SP100) mRNA, complete cds
4913	14792	24657	4.90	4.0E-71	7057602	NT	Homo sapiens putative hemagglutinin-binding protein (SOUL), mRNA

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Probe Seq ID No.	Exon ORF Seq ID No.	Most Similar (Top) NT BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8077 17986	282/8	3.32	3.0E-71 AA557683.1	EST_HUMAN	ntd45h10.31 NOLC-GAP_F4 Homo sapiens cDNA clone IMAGE:1043683 similar to contains PTR5.3 PTR6 repetitive element;
1210 20988		2.52	2.0E-71 HS116526.2	NT	Homo sapiens chromosome 21 segment HS116526
5259 15161	24957	6.96	2.0E-71 HS149421	NT	Human mRNA for KIA0272 gene; partial cds
5259 15161	24958	6.96	2.0E-71 HS149422	NT	Human mRNA for KIA0272 gene; partial cds
8022 17872	28114	2.56	2.0E-71 AR053703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHS-CoA) gene, nuclear gene encoding mitochondrial protein, complete cds
8022 17872	28115	2.05	2.0E-71 AR053703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHS-CoA) gene, nuclear gene encoding mitochondrial protein, complete cds
8070 17970	28216	2.3	2.0E-71 BE018477.1	EST_HUMAN	hsa8146_7 Y1 NIH_3T3_10_Homo sapiens cDNA clone IMAGE:1043683 similar to SW-R23B_HUMAN P54727_UV EXCISION REPAIR PROTEIN RAD23_HOMOLOG_B ; yeast4508.11 Scores fell over sphere INFLU_Homo sapiens cDNA clone IMAGE:1043683 similar to SW-R23B_HUMAN
9181 18920		0.22	2.0E-71 TS9469.1	EST_HUMAN	ntd45h10.31 Scores fell over sphere INFLU_Homo sapiens cDNA clone IMAGE:1043683 similar to SW-R23B_HUMAN
622 10550	20371	2.11	1.0E-71 AN077027.1	EST_HUMAN	contains LOR1 b2 LOR1 repetitive element;
623 10851	20369	1.63	1.0E-71 7705291	NT	Homo sapiens natural cell death-related protein (LOC51816), mRNA
1084 11000	20841	4.01	1.0E-71 AF203860.1	NT	Homo sapiens phosphatidylinolipid kinase 2 gene, exon 2 through 15 and complete cds
1317 11224	210840	10.66	1.0E-71 AF012872.1	NT	Homo sapiens phosphatidylinolipid kinase 2 (PLAK230) mRNA, complete cds
2036 11927	21821	1.23	1.0E-71 AB017007.1	NT	Homo sapiens PLAK230 mRNA, partial cds
2036 11927	21822	1.23	1.0E-71 AB017007.1	NT	Homo sapiens PLAK230 mRNA, partial cds
2081 12528	22416	4.85	1.0E-71 7657163	NT	Homo sapiens hairy/integrator-like-spat related with VRFIV motif like (REYV), mRNA
3457 13373	23170	1.17	1.0E-71 AF116665.1	NT	Homo sapiens inorganic pyrophosphatase mRNA, complete cds
3440 13462	23256	4.73	1.0E-71 AF245210.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3546 13462	23257	4.73	1.0E-71 AF245210.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3597 13511	23258	0.94	1.0E-71 BE122850.1	EST_HUMAN	02_15 Human Epidermal Keratinocyte Subtraction Library_Uprregulated Transcripts Homo sapiens cDNA clone 02_15 mRNA
3597 13511	23259	0.94	1.0E-71 BE122850.1	EST_HUMAN	02_15 Human Epidermal Keratinocyte Subtraction Library_Uprregulated Transcripts Homo sapiens cDNA clone 02_15 mRNA
3681 13595	23381	1.87	1.0E-71 AF245210.1	NT	Homo sapiens snail-like protein precursor (AFRN) gene, exons 1-19
4570 14266	24050	1.69	1.0E-71 DB2446.1	NT	Human mRNA for KIA0206 gene, complete cds
6044 16947	26079	1.4	1.0E-71 114265182	NT	Homo sapiens GAGL79 mRNA, partial cds
6320 16168	26351	10.62	1.0E-71 U80753.1	NT	Homo sapiens GAGL79 mRNA, partial cds
6750 16629	26815	6.93	1.0E-71 11425430	NT	Homo sapiens myomelin (Myo-1 protein) mRNA
6816 16734	26986	4.18	1.0E-71 89228611	NT	Homo sapiens myotilin-like protein FLJ10988 (FLJ10988), mRNA

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 Single Exon Probes Expressed in Heart

Probe Seq ID NC:	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6916 16794	26987		4.18	1.0E-71	AY007643.1	NT	Homo sapiens hydrophilic protein FLJ10986 [FLJ10986], mRNA [Homo sapiens cyclophrine c oxidase subunit Vial-related protein gene, complete cds]
7748 17958	27820		6.49	1.0E-71	AY007643.1	NT	AY761217.1 MDS_Homo sapiens cDNA clone MDS/E03_05'
8164 18052			3.39	1.0E-71	AY761217.1	EST_HUMAN	AY761217.1 MDS_Homo sapiens cDNA clone MDS/E03_05'
8226 18136	28383		4.87	1.0E-71	AY761217.1	EST_HUMAN	[Homo sapiens cyclophilin factor XIII, A1 polypeptide [FLJ3A1], mRNA]
8486 18359	28623		3.2	1.0E-71	1141791	NT	Homo sapiens cyclophilin factor XIII, A1 polypeptide [FLJ3A1], mRNA
8486 18359	28624		2.33	1.0E-71	1141791	NT	Homo sapiens leucovorayl aminopeptidases [LNPFP], mRNA
9547 19147			4.48	1.0E-71	AEO113991	NT	Homo sapiens gene for AF-4, complete cds
401 10347	20173		1.15	9.0E-72	AJ657655.1	EST_HUMAN	WAF503.X1_NCL_CDNA_Lut/Homo sapiens cDNA clone IMAGE:2423198 3' similar to TRC088705_08705
401 10347	20174		1.15	9.0E-72	AJ657655.1	EST_HUMAN	WAF503.X1_NCL_CDNA_Lut/Homo sapiens cDNA clone IMAGE:2423188 3' similar to TRC088705_08705
4023 13926	23700		5.23	7.0E-72	4501890	NT	Homo sapiens acetylase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
4023 13926	23701		5.23	7.0E-72	4501890	NT	Homo sapiens acetylase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
4023 13926	23702		5.23	7.0E-72	4501890	NT	Homo sapiens acetylase 2, mitochondrial (ACO2), nuclear gene, encoding mitochondrial protein, mRNA
6228 16104	26244		2.94	7.0E-72	SA1694.1	NT	[neurogenins] P1MMP=proline-rich alpha Human, Genomic, 1182 nt, segment 2 of 3]
6885 19764			3.72	6.0E-72	AL162946.2	NT	[Homo sapiens chromosome 21 segment 1S21C046
8768 18603	26803		2.22	6.0E-72	BPO09578.1	EST_HUMAN	F07313 MYOSIN LIGHT CHAIN KINASE, SKELETAL MUSCLE ;
56 10043	16854		0.88	6.0E-72	BF333707.1	EST_HUMAN	Q9VZ-C50010-150900-398=+11 CS50010_Homo sapiens cDNA
66 10453	19855		0.88	6.0E-72	BF333707.1	EST_HUMAN	Q9VZ-C50010-150900-398=+11 CS50010_Homo sapiens cDNA
57 10443	19854		2.95	6.0E-72	BF333707.1	EST_HUMAN	C9VZ-C50010-150900-398=+11 CS50010_Homo sapiens cDNA
57 10443	19855		2.95	6.0E-72	BF333707.1	EST_HUMAN	Q9VZ-C50010-150900-398=+11 CS50010_Homo sapiens cDNA
1122 11037			2.75	6.0E-72	L17645.1	NT	Homo sapiens alpha-tubulin mRNA, complete cds
6150 16023	26163		1.47	6.0E-72	AU112684.1	EST_HUMAN	AU112684.1 NT_2852_Homo sapiens cDNA clone NT2R1_2003761 5'
7097 16974	27167		3.55	6.0E-72	BF161274.1	EST_HUMAN	ab2003.y1_Schneider_fetal brain 00005_Homo sapiens cDNA clone IMAGE:2782684 5' similar to
8559 16437	28705		3.18	5.0E-72	BF3331671.1	EST_HUMAN	TRC09785_09785_HYPOTHEITALC_34_KD_protein ; contains element MSR11 repetitive element ;
8559 16437	28707		3.18	5.0E-72	BF3331571.1	EST_HUMAN	MR4-BT0568-101000-005-005_BT0568_Homo sapiens cDNA
9233 19700			2.43	6.0E-72	BF9209545.1	EST_HUMAN	Q9VZ-BT0632-286803-342=+10 BT0632_Homo sapiens cDNA

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Probe Seq ID No.	Exon Seq ID NO:	ORF Seq ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4776	14902	26402	1.06	4.0E-72	11034941	NT	Homo sapiens hypothetical protein dJ107fB20.2 (JU057B20.2). mRNA
6380	16242		1.4	4.0E-72	57252697	NT	Homo sapiens heart domain and RLD 2 (HERC2), mRNA
7033	17484	27705	1.42	4.0E-72	8822569	NT	Homo sapiens hypothetical protein FLJ20758 (FLJ20758). mRNA
8815	18628	28958	7.32	4.0E-72	JM04241.1	EST_HUMAN	WormBase 235 Homo sapiens cDNA clone IMAGE:1059645'
8923	19737	26030	2.76	4.0E-72	781910.1	EST_HUMAN	yeastDB 61 Scores total titer splicen INES_Homo sapiens cDNA clone IMAGE:108549 3'
9003	19185	28248	4.2	4.0E-72	A277546.2	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor atG5at6.51 Scores leaflet_NTH_Homo sapiens cDNA clone 1310260_3'
885	10811		4.88	3.0E-72	AA724283.1	EST_HUMAN	
1138	11053	20984	6.06	3.0E-72	U16306.1	NT	Human chondroitin sulfate proteoglycan variant V0 splice-variant precursor peptide mRNA, complete cds
1139	11063	20895	8.06	3.0E-72	U16306.1	NT	Human chondroitin sulfate proteoglycan variant V0 splice-variant precursor peptide mRNA, complete cds
3037	12865	22769	10.51	3.0E-72	AJ225043.1	NT	Homo sapiens hypothetical protein FLJ20585 (FLJ20585). mRNA
3241	13184	22963	2.65	3.0E-72	86232548	NT	TGF- β delta-2/C- α T-cell receptor δ and C alpha fusion gene (alternatively spliced, splice junction)
3750	13893	23445	2.51	3.0E-72	S77599.1	NT	(Human) precursor B-cell line REH: mRNA Partial, 211 nt
4445	14339	24129	3.22	3.0E-72	11416196	NT	Homo sapiens hypothetical protein (FLJ11271). mRNA
4477	14717	24560	0.64	3.0E-72	AB54533.1	EST_HUMAN	WormBase 236 Homo sapiens cDNA clone IMAGE:2307254 3'
5639	15832	28943	2.4	3.0E-72	AB73367.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GFRB10) gene, exon 5
5639	15592	25644	2.4	3.0E-72	AB73387.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GFRB10) gene, exon 5
6743	15651	25758	4.35	3.0E-72	AB22004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
5743	15651	25759	4.35	3.0E-72	AB22004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
5688	15883	26016	3.02	3.0E-72	4826987	NT	Homo sapiens fibromodulin-like (RIP3L). mRNA
6475	16334	26501	2.32	3.0E-72	186007.1	NT	Homo sapiens basic transcription factor 2 p44 (BTF4) gene, partial cds, neuronal apoptosis inhibitory protein (nrip) and survival motor neuron protein (smn) genes, complete cds
6775	16634	26822	1.26	3.0E-72	5031892	NT	Homo sapiens nuclear receptor subfamily 1, group H, member 3 (NR1H3). mRNA
7960	17810	28051	1.3	3.0E-72	AB28289.1	NT	Homo sapiens S100A12 gene for Calgranulin C, exon 2 and joined cds
9516	18129	25262	1.85	3.0E-72	AB11359.1	NT	-Homo sapiens gene for Af-6, complete cds
8122	18010	28257	4.45	2.0E-72	AA789277.1	EST_HUMAN	zipper domain for stress, heat, NTH_Homo sapiens cDNA clone 1536693 3' similar to gBX20265 H sapiens mRNA for 7S RNA pseudogene (7HUMAN).
9800	18182	28246	3.74	2.0E-72	AF182714.1	EST_HUMAN	Rattus norvegicus putative phosphoprotein translocator mRNA
2030	11921	21812	2.61	1.0E-72	AA840225.1	EST_HUMAN	aa13202.51 Scores Benfrynd, turner_NTH_Homo sapiens cDNA clone IMAGE:1581595 3'
6524	15441	25565	3.15	1.0E-72	7857676	NT	Homo sapiens nucleolar protein 41 (heatl homolog) (NP41). mRNA
6548	15854	25976	19.78	1.0E-72	119215781	NT	Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MyH13). mRNA

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Probe Seq ID No.:	Exon ORF Seq ID No.:	ORF Seq ID No.:	Expression Signal	Most Similar BLAST Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6949 15854 269777	19.78	1.0E-72	BE1756341	11321578	NT	Homo sapiens myoelin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA	
6501 15390 26533	3.82	1.0E-72 BE1756341	EST_HUMAN	RC4+T0576/H10306-012-002 HT0376 Homo sapiens cDNA			
6501 16360 26534	3.82	1.0E-72 BE1756341	EST_HUMAN	RC4+T0576/H10306-012-002 HT0376 Homo sapiens cDNA			
7552 17383 27584	6.06	1.0E-72 AP222742.1	NT	Homo sapiens syntethic glycoprotein SC2 (SC2) mRNA, complete cds			
7552 17383 27585	6.06	1.0E-72 AP222742.1	NT	Homo sapiens syntethic glycoprotein SC2 (SC2) mRNA, complete cds			
1443 11348 21213	1.23	9.0E-73 AV374968.1	EST_HUMAN	LOC51068-012-011 HT0368 Homo sapiens cDNA			
6320 18197 21213	23.9	9.0E-73	11424098	NT	Homo sapiens ribosomal protein L13a (RPL13A), mRNA		
1022 10359 20782	1.03	9.0E-73 AV070756.1	EST_HUMAN	neurogranin, cytoskeletal protein Ad-1565, isoform A, mRNA			
1369 11304 21163	3.06	8.0E-73 AI024877.1	EST_HUMAN	ovostatin, HEPATOCYTE PROTEIN Ad-1565, isoform A, mRNA			
5669 15864 25988	4.6	8.0E-73	11424098	NT	Homo sapiens testis-specific nuclear protein (LOC51761), mRNA		
6715 16595 26785	2	8.0E-73 AI113129.1	NT	Homo sapiens lysosome hydrolase, cathepsin D, mRNA, complete cds			
7385 17254 27459	15.98	8.0E-73 BE016900.1	EST_HUMAN	luciferin:NAD(P)H:cytochrome P450 reductase, gamma-actin mRNA, complete cds (MOUSE)			
7614 17466 27682	2.22	8.0E-73	116280327	NT	CYTOSLIC ALBUMIN 2 (RHMAN); qb/M2149b Mouse cytosolic gamma-actin mRNA, complete cds (MOUSE)		
7614 17405 27083	2.22	8.0E-73	116280327	NT	Homo sapiens interleukin 12 receptor, beta 1 (IL12B1), mRNA		
9446 19691 26232	2.12	8.0E-73	AI020209.1	NT	Homo sapiens interleukin 12 receptor, beta 1 (IL12B1), mRNA		
9554 19217 25235	2.59	8.0E-73	11418169	NT	Homo sapiens P20 membrane protein (P20MP) mRNA		
1118 11033 20875	0.78	7.0E-73	8922350	NT	Homo sapiens thyroid hormone-binding protein FLJ20309 (FLJ20309), mRNA		
3261 13184 22983	1.06	7.0E-73 AI162206.2	NT	Homo sapiens chromosome 21 segment HS21C008			
4863 14743 27682	1.62	7.0E-73 AI162206.2	NT	Homo sapiens chromosome 21 segment HS21C008			
162 10120 237	0.0E-73	AI162218.2	NT	Homo sapiens chromosome 21 segment HS21C008			
6225 16121 26274	3.36	0.0E-73 BE166574.1	EST_HUMAN	210+101494+20000-137-03 HT0368 Homo sapiens cDNA			
6215 15138 24832	2.05	4.0E-73	11422156	NT	Homo sapiens HEL G protein (FAM141), mRNA		
1818 11176 21595	0.99	3.0E-73	11435913	NT	Homo sapiens hemoglobin binding protein (HEBP) mRNA		
1818 11175 21596	0.99	3.0E-73	11435913	NT	Homo sapiens hemoglobin binding protein (HEBP) mRNA		
853 10780 20970	1.75	2.0E-73 AI199897.1	EST_HUMAN	Homo sapiens BASS1 (BASS1) mRNA, partial cds			
1902 11798 11798	1.48	2.0E-73 AV788608.1	EST_HUMAN	TC-14N0006-27(40C-01)-1-245 N00065 Homo sapiens cDNA			
2281 12135 22869	1.1	2.0E-73 UO1317.1	NT	Human beta globin region on chromosome 11			
3144 13169 22869	3.48	2.0E-73	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (GASPF) mRNA		
3503 13420 23221	0.96	2.0E-73	7686539	NT	Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, partin (PARK2), transcript variant 3, mRNA		

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal Value	Most Similar BLAST-E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3503	13420	28222	0.96	2.0E-73	7085059	NT	Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, partin (PARTN), transcript variant 3, mRNA
5902	15908	28593	7.6	2.0E-73	ABU048811	NT	Homo sapiens mRNA for KIAA051 protein, partial cds
6023	15227	28098	1.35	2.0E-73	11451471	NT	Homo sapiens integrin 4 receptor (ILR), mRNA
7893	17843	28005	2.45	2.0E-73	11450168	NT	Homo sapiens glutathione synthetase (GSS), mRNA
7903	17843	28006	2.45	2.0E-73	11450090	NT	Homo sapiens superillin (SVL), transcript variant 1, mRNA
8138	18028	28272	4.14	2.0E-73	11431568	NT	Homo sapiens KIAA060 protein, Cys15-associated, gamma-interadipin ear containing, AIF-binding protein 2 (KIAA060), mRNA
8408	18284	28557	3.79	2.0E-73	48557612	NT	Homo sapiens galactosylceramidase (Krabbe disease) (GALC), mRNA
8408	18284	28558	3.79	2.0E-73	48557612	NT	Homo sapiens galactosylceramidase (Krabbe disease) (GALC), mRNA
8432	18308	28502	1.78	2.0E-73	ABU20962	1	Homo sapiens mRNA for KIAA1016 protein, partial cds
9447	11798	21512	1.72	2.0E-73	FAA000002746001	-04	Homo sapiens human sigma-1 mRNAs
1743	11844	21512	1.57	1.0E-73	AU121585	1	AU121585 MAMMA10/C0490 5'
2434	12311	22207	0.93	1.0E-73	AU168494	1	Gallus gallus Daz2 protein (Daz2), mRNA, complete cds
7469	17529	27554	1.38	1.0E-73	AU147427	1	EST_HUMAN
723	10855	28140	2.67	1.0E-73	BE385477	1	EST_HUMAN
5608	15521	25602	1.39	8.0E-74	48557426	NT	Homo sapiens CD36-like 4 (CD36L4), mRNA
5608	15521	25603	1.84	8.0E-74	5883194	1	Ca2+-calmodulin-dependent protein kinase isoform I (tau), brain, mRNA
5608	15521	25603	1.84	8.0E-74	5883194	1	Ca2+-calmodulin-dependent protein kinase isoform II (tau), brain, mRNA
1906	11801	21679	3.01	7.0E-74	AJ001699	1	NT
3286	13207	28007	0.98	7.0E-74	AL162346	2	Homo sapiens chromosome 21 segment 1 (ES21CR04)
7327	17231	27432	2	7.0E-74	BE897432	1	EST_HUMAN
9653	19216	26234	2.81	7.0E-74	BE204305	1	EST_HUMAN
1106	11022	20895	2.58	6.0E-74	AJ008071	1	NT
1059	11514	21373	1.03	6.0E-74	AV263177	1	EST_HUMAN
2268	12152	22050	9.95	6.0E-74	ABU28290	1	EST_HUMAN
2268	12152	22051	9.98	6.0E-74	ABU28302	1	EST_HUMAN
2834	12762	2553	1.38	6.0E-74	AV014039	1	U+/-B10 anti-H-02, anti-ICN1 CGAP_S1
2834	12762	2554	1.39	6.0E-74	AV014039	1	EST_HUMAN
3652	13566	23352	2.63	6.0E-74	BE140884	1	Int6f1_x1 CGAP_S1
							Int6f1_x1 CGAP_S1

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Probe Seq ID No:	Exon Seq ID No:	ORF SEC ID NO:	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
36521 13866	23363	2.63	6.0E-74	EE068846.1	EST_HUMAN	Ind�611x1 NCI-ORAP-Kid11 Homo sapiens cDNA clone IMAGE-31323323'.
52934 15215	25016	2.49	6.0E-74	11086013	NT	Homo sapiens actin filament associated protein (AFAP). mRNA
8877 10183	206951	5.6E-74	AIV02016962	EST_HUMAN	drt1507 Vt Merton Field Cochlear Homo sapiens cDNA clone IMAGE-2483704.5	
26699 12834	519	5.6E-74	AV362768.1	EST_HUMAN	PM-C10285-271056-0011#07 CT0285-Homo sapiens cDNA	
52339 15340	24045	2.16	11425417	NT	Homo sapiens phosphatidylinositol diacylceran, class I [PI(4,5)G2] mRNA	
52339 14545	28526	10.48	6.0E-74	X86970.1	NT	H-sapiens mRNA for TRCR16 protein
56583 15479	25552	6.74	5.0E-74	4507860	NT	Homo sapiens vAMP (veinlet-associated membrane protein)-associated protein A (33kD) (VAPA) mRNA, gene related products
58002 15616	25954	1.85	6.0E-74	11431471	NT	Homo sapiens interferulin 4 receptor (IL4R). mRNA
61620 10014	26152	3.73	5.0E-74	11431471	NT	Homo sapiens interferulin 4 receptor (IL4R). mRNA
81117 18009	26232	1.86	5.0E-74	11346583	NT	Homo sapiens hypothetical protein FL115222 (FLJ15222). mRNA
81117 18009	26233	1.88	5.0E-74	Y06420.1	NT	H-sapiens mRNA for HIF-1
8274 10243	20033	1.89	5.0E-74	D76476.1	NT	H-sapiens mRNA for HIF-1
834 10761	20511	4.95	4.0E-74	AB022842.1	NT	Homo sapiens mRNA for KIAA0716 protein, partial cds
1919 11814	21662	2.44	4.0E-74	AB023898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
1919 11814	21663	2.44	4.0E-74	AB023898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
2027 11918	21619	4.34	4.0E-74	45061932	NT	Homo sapiens proteasome (prosome, macropain) subunit; beta type 1 (PSMB1) mRNA
2027 11918	21639	4.34	4.0E-74	45061932	NT	Homo sapiens proteasome (prosome, macropain) subunit; beta type 1 (PSMB1) mRNA
2086 11970	21870	1.21	AB032894.1	NT	Homo sapiens mRNA for KIAA1176B protein, partial cds	
23977 12357	22159	0.98	4.0E-74	JQ0086976	NT	Homo sapiens PLP gene
34853 13390	22772	2.44	4.0E-74	JQ0086976	NT	Homo sapiens chromosome 21 segment HS21C10
3973 13890	22665	0.93	4.0E-74	AL165210.2	NT	Homo sapiens chromosome 21 segment HS21C10A7
48512 14561	24112	1.57	4.0E-74	7862163	NT	Homo sapiens KIAA0456 gene product (KIAA0456). mRNA
48512 14406	24112	0.82	4.0E-74	Z17227.1	NT	Homo sapiens mRNA for transmembrane receptor protein
50006 14860	24644	3.76	4.0E-74	4504326	NT	Homo sapiens hydroxycrotonyl-Coenzyme A thiolesterase (hydroxycrotonyl-Coenzyme A thiolesterase) mRNA
50006 14860	24645	3.76	4.0E-74	4504326	NT	hydrolase (thiolesterase) protein, beta subunit (HADHB) mRNA
68977 16854	5.03	3.0E-74	AA30378.1	EST_HUMAN	EST13131 Yunnan fumon I Homo sapiens cDNA 5' end similar to similar to ribosomal protein A	

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accesion No.	Top Hit Database Source	Top Hit Descriptor	
7394	17312	27619	2.42	3.0E-74	M78584.1	EST_HUMAN	EST01132 Subtracted Hippocampus, Striatum (cat. #B020205) Homo sapiens cDNA clone HICPF#81	
7921	17771	28610	2.22	3.0E-74	AJ601163.1	EST_HUMAN	no7051 nt NC1 Homo sapiens cDNA clone IMAGE:1010984 3'	
942	10897	20714	128.24	2.0E-74	7869491	NT	Homo sapiens glycerophosphate-2-phosphate hydrolytogenase (GPED), mRNA	
942	10897	20715	128.24	2.0E-74	7869491	NT	Homo sapiens glycerophosphate-2-phosphate hydrolytogenase (GPED), mRNA	
1198	11071	20916	1.01	2.0E-74	AF020062.1	NT	Human endogenous retrovirus HERV-K/H47D	
1224	11132	20986	1.15	2.0E-74	AB056285.1	EST_HUMAN	w05167_x1 NT1 CGAP_Luc28 Homo sapiens cDNA clone IMAGE:2547204 3' similar to SWGG98_HUMAN	
1577	11481	21340	2.94	2.0E-74	4885168	NT	Homo sapiens epidermal growth factor receptor (whole extracellular membrane viral (v erb-b) oncogene homolog) (EGFR), mRNA	
1577	11481	21341	2.94	2.0E-74	4885168	NT	Homo sapiens epidermal growth factor receptor (whole extracellular membrane viral (v erb-b) oncogene homolog) (EGFR), mRNA	
2568	12430	22323	1.09	2.0E-74	AU57280.1	EST_HUMAN	P12_1_15_G11.7 tumor2/Homo sapiens cDNA 3'	
4937	14815	24682	1.95	2.0E-74	AL3956022.1	NT	Novel human gene mapping to chromosome 22	
4937	14815	24683	1.95	2.0E-74	AL3956022.1	NT	Novel human gene mapping to chromosome 22	
4942	14820	24588	1.89	2.0E-74	JC29863.1	EST_HUMAN	Human platelet glycoprotein IIIb mRNA, 3' end	
6543	19446	26530	1.84	2.0E-74	BE711134.1	EST_HUMAN	RC36-H107R8-229560-011-C03_H107R8/Homo sapiens cDNA	
6594	19446	26584	1.98	2.0E-74	114395897	NT	Hominoidea_P02739_protein (P02739_NY-CC-38), mRNA	
6594	19446	26595	1.98	2.0E-74	114395897	NT	Hominoidea_P02739_protein (P02739_NY-CC-38), mRNA	
6629	19448	26584	2.57	2.0E-74	114395897	NT	Hominoidea_P02739_protein (P02739_NY-CC-38), mRNA	
6629	19448	26585	2.57	2.0E-74	114395897	NT	Hominoidea_P02739_protein (P02739_NY-CC-38), mRNA	
6219	19035	26525	1.55	2.0E-74	BF0307818.1	EST_HUMAN	601557524F1 NIH M/C, 58 Homo sapiens cDNA clone MAGIE:3827549 5'	
6631	16811	28700	1.43	2.0E-74	AB037816.1	NT	Homo sapiens mRNA for KIF1A356 protein, purified cells	
7398	17516	27523	6.54	2.0E-74	AL165204.2	NT	Homo sapiens chromosome 21 segment 1 [S2] C004	
9387	19447	28108	1.46	2.0E-74	AA198181.1	EST_HUMAN	zg61606_51 Stratigraphy muscle 887709 Homo sapiens cDNA clone IMAGE:6528018 3'	
9603	19380	28331	1.26	2.0E-74	BF0686588.1	EST_HUMAN	60212142F1 NIH M/C, 55 Homo sapiens cDNA clone MAGIE:4278569 5'	
47	10135	19841	0.97	1.0E-74	7867354	NT	Homo sapiens MstaphageninK-related kinase (MINK), mRNA	
334	10293	20108	3.5	1.0E-74	AV816465.1	EST_HUMAN	QVA-S10234-18193-037405 S10234_Homo sapiens cDNA	
491	10454	20247	1.19	1.0E-74	BF0228259	NT	Homo sapiens hypothetical protein FLJ11228 (FLJ11228), mRNA	
-	4897	10439	20262	2.7	1.0E-74	X02344.1	NT	Homo sapiens beta 1 gene
866	10824	20331	1.35	4.5E-70	4585020	NT	Homo sapiens zinc finger protein 269 (ZNF269), mRNA	
983	10066	20761	2.17	1.0E-74	AL165245.2	NT	Homo sapiens chronicomycin 21 segment 1 [S2] C0046	
2179	12965	21988	6.19	1.0E-74	AB020269.1	NT	Homo sapiens DNA-(c-far Human P22Q), complete cds	
3100	13026	22822	5.98	1.0E-74	47385857	NT	Homo sapiens mannosidase, alpha, class 2A, member 1 (MAN2A1), mRNA	

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST Hit Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3887 13708	28584	4.56	1.0E-74	AL165268.2	NT	Homo sapiens chromosome 21 segment HS21CG008	
3974 13881	28565	0.9	1.0E-74	BE085080.1	EST_HUMAN	RC2-BT0542-01-f06 BT0542-Homo sapiens cDNA h27908.xt NC1 CGAP_L124 Homo sapiens cDNA clone IMAGE:3213963 3' similar to WP_050511.12	
4170 14070	28945	0.9	1.0E-74	BE457789.1	EST_HUMAN	CE_7851;	
5112 14890	24754	1.19	1.0E-74	DB5327.1	NT	Homo sapiens DCRH1 mRNA, partial cds	
6694 16574	26755	1.83	1.0E-74	BE1549105.1	EST_HUMAN	60107006887-1 NIH_3T3 MAGE3:3462600 5'	
6954 16574	26756	1.83	1.0E-74	BE1549105.1	EST_HUMAN	60107006887-1 NIH_3T3 MAGE3:3462600 6'	
7112 16680	27182	3.92	1.0E-74	AF214562.1	NT	Homo sapiens tracheal epithelial enriched protein (PLUNC) gene, complete cds	
7893 17835	28079	1.31	1.0E-74	BE152654.1	EST_HUMAN	Homo sapiens tyrosine kinase protein FLJ10785 mRNA	
9024 18818	28108	1.6	1.0E-74	11417856_N	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA	
9106 18873	28108	2.83	1.0E-74	BE1549105.1	NT	Homo sapiens DNA	
9249 12066	21988	4.14	1.0E-74	AB0202059.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1)	
9720 19261		1.30	1.0E-74	AF240705.1	NT	genes, complete cds.	
2907 12475		4.07	8.0E-75	AF175228.1	NT	Homo sapiens DNA cyclase-5 methyltransferase 3B (DNMT3B) mRNA, complete cds	
6406 19659		1.67	8.0E-75	AL1652022.2	NT	Homo sapiens chromosome 21 segment HS21CG002	
2273 12167	22925	0.88	8.0E-75	AB17415.1	EST_HUMAN	W423408.xt NC1 CGAP_P22-Homo sapiens cDNA clone IMAGE:2471554 3' similar to gbr:MI4123_cds4	
6128 14995		0.60	8.0E-75	AA789285.1	EST_HUMAN	RETROVIRUS-RELATED POLYPROTEIN (HUMAN); CHROMOSOME RNA RECOGNITION MOTIF PROTEIN; MFS-SN00002-000000000-000 SN00040 Human capsid cDNA	
5102 14870	24746	1.04	5.0E-75	BE841305.1	EST_HUMAN	60218861161 NIH_3T3 MAGE4:288738.3'	
7395 17313	27520	1.22	5.0E-75	BE150254.1	EST_HUMAN	HS15124-xt NC1 CGAP_OG_Homo sapiens cDNA clone IMAGE:2242390 3' similar to TRP97361 P0797361	
7876 17726	21966	3.1	5.0E-75	AL165823.1	EST_HUMAN	HYPOTHETICAL_201_KD_FRT01E1;	
107 10088	18903	1.06	4.0E-75	BE081333.1	EST_HUMAN	Q1V-BT0532-01203-078-002 BT0532-Homo sapiens cDNA	
451 10395		1.23	4.0E-75	NC8757.1	EST_HUMAN	yeD90B_1-1 seven melanocyte 2NbHM_Homo sapiens cDNA clone IMAGE:200665 6'	
1128 11620	21468	1.5	4.0E-75	AV807290.1	EST_HUMAN	CAM00N0007-1 NIH_3T3 MAGE2:305334.4'	
2518 12747	22540	4.65	4.0E-75	BE140464.1	EST_HUMAN	6013038687-1 NIH_3T3 MAGE_21_Homo sapiens cDNA clone IMAGE:305334.4'	
5702 15698		4.29	4.0E-75	5674957	NT	Homo sapiens selenocysteine insertion factor 3, subunit 1 (TFCSS3), mRNA	
0052 15653	26084	1.56	4.0E-75	11417946	NT	Homo sapiens NIFSNAP1, C elegans, homolog 1 (NIFSNAP1), mRNA	
6052 15653	26085	1.56	4.0E-75	11417946	NT	Homo sapiens NIFSNAP1_C, elegans, homolog 1 (NIFSNAP1), mRNA	
8072 17663	28214	9.72	4.0E-75	76896565_N	NT	* Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MHC-1), mRNA	
9866 10609	20754	2.91	3.0E-75	AF151623.1	NT	Homo sapiens HTR4, serine protease (PRSS11) gene, complete cds	
9877 10609	20754	2.25	3.0E-75	AF151623.1	NT	Homo sapiens HTR4, serine protease (PRSS11) gene, complete cds	

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Probe	Exon	ORF SEQ ID NO:	BLAST E Value	Most Similar BLAST E	Top Hit Assesment No.	Top Hit Database Source	Top Hit Descriptor
1795	1/683	21659	1.98	3.0E-75	ABD1/1163.1	NT	Human sapiens mRNA for KIAA0081 protein, partial cds
20685	1/9565	18852	1.05	3.0E-75	480/7354	NT	Human sapiens synaptosomal-associated protein, 28kD (SNAP25) mRNA
2373	12285	22144	3.68	3.0E-75	47561/513	NT	Human sapiens synaptosomal-associated protein, 28kD (SNAP25) mRNA
2688	12516	22711	1.19	3.0E-75	ALU65/103.1	NT	Human sapiens chromosome 21 segment protein HS2; C001
3162	13077	22877	1.33	3.0E-75	AB011153.1	NT	Human sapiens mRNA for KIAA0081 protein, partial cds
3306	13227	23030	1.01	3.0E-75	67/2935.1	NT	Human calcitonin-receptor-like receptor-binding protein (PLA2) mRNA, complete cds
4077	13972	23766	1.42	3.0E-75	D87653.1	NT	Human sapiens mRNA precursor protein, complete cds
4535	14223	24015	0.95	3.0E-75	D87675.1	NT	Human sapiens KIAA0971 protein (KIAA0971), mRNA
6056	16041	26183	1.53	3.0E-75	7982/421	NT	Human sapiens HIR (histone cell cycle regulation defective S cerevisiae) homolog A (HIRA), mRNA
6358	16041	28184	1.65	3.0E-75	11520/319	NT	Human sapiens HIR (histone cell cycle regulation defective S. cerevisiae) homolog A (HIRA), mRNA
6234	18150	28248	3.83	3.0E-75	7865/209	NT	Human sapiens KIAA0023 gene product (KIAA0023), mRNA
6234	18150	28249	3.85	3.0E-75	7865/209	NT	Human sapiens KIAA0023 gene product (KIAA0023), mRNA
6494	16303	26522	2.92	3.0E-75	4886/652	NT	Human sapiens Oncoprotein TMA (TMA) mRNA
6494	16303	26523	2.62	3.0E-75	4886/652	NT	Human sapiens Oncoprotein TMA (TMA) mRNA
7193	17070	27256	1.23	3.0E-75	11/20804	NT	Human sapiens snRNP U1 (drosophila homolog), isoform protein (SVA111), mRNA
5480	16400	27360	1.5	2.0E-75	AV73/680.1	EST_HUMAN	ATM gene, EST/DB/DOE/DG
7082	16869	27152	1.73	2.0E-75	ALB11785.1	EST_HUMAN	q98L62/2.1 INCL CGAP_#5 Homo sapiens cDNA clone IMAGE:16198863 similar to TR_Q6g386 Q6g386
2265	12199	23937	5.08	1.0E-35	AVH135.1	EST_HUMAN	POLE/POLE gene, PTR7 repetitive element
2816	12843	23644	3.17	1.0E-35	AS222/1	NT	Human sapiens ERCC2 gene, exons 1-8 (partial)
6903	16781	30016	4.13	1.0E-35	3A9/20750.1	EST_HUMAN	25f70/3.5 t Scores, bestis_NHT_Homo sapiens cDNA clone IMAGE:7264/485 3' similar to gb:M139240 GS
7423	11280	27490	4.13	1.0E-35	B31/3845.1	EST_HUMAN	RIBOSSOMAL PROTEIN S17 (HUMAN)
7423	12250	27560	3.73	1.0E-35	B31/3845.1	EST_HUMAN	6011900254/1 NIH 3T3/19 Homo sapiens cDNA clone IMAGE:4112867 8 5'
6257	16137	30016	3.99	1.0E-35	AA06/5277.1	EST_HUMAN	6011900254/1 NIH 3T3/19 Homo sapiens cDNA clone IMAGE:4112867 8 5'
8441	18316	28573	2.6	1.0E-75	BEB22/381.1	EST_HUMAN	Hom sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-46, and partial cds, alternatively spliced
62959	15100	24862	2.86	1.0E-75	BEB22/502.1	EST_HUMAN	6011437130/1 NIH_MSC-72 Homo sapiens cDNA clone IMAGE:3922303 5'
29	100%	41006	1.45	9.0E-76	AHE004/4	EST_HUMAN	W05B10/1 NT1 NC1 CGAP_Q6CS Homo sapiens cDNA clone IMAGE:2307163 3' similar to TRO765285 Q75235

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal Value	Most Similar (Top) Hit BLAST E Value	Top Hit Assesment No.	Top Hit Database Source	Top Hit Descriptor
5542	15748	26861	7.85	3.0E-76 AF286598.1	NT	Human sequins angiostatin binding protein 1 mRNA, complete cds Yp20g1.1x1 Homo sapiens cDNA clone IMAGE:21718425	
6737	16616	26866	1.92	3.0E-76 N42671.1	EST_HUMAN		
7602	17455	27067	3.32	NT	EST_HUMAN		
7615	17468	27064	3.32	3.0E-76 AA442309.1	EST_HUMAN	Zu54dH11.1x1 Sorensen testis, NT Homo sapiens cDNA clone IMAGE:21773009.3	
7615	17469	27065	1.32	3.0E-76 AA442309.1	EST_HUMAN	Zu54dH11.1x1 Sorensen testis, NT Homo sapiens cDNA clone IMAGE:21774616	
9014	19337	26902	2.13	3.0E-76 AA442309.1	EST_HUMAN	Zu54dH11.1x1 Sorensen testis, NT Homo sapiens cDNA clone IMAGE:21774613	
9120	19745	24885	3.75	3.0E-76 AW937984.1	EST_HUMAN	EST368625 MAGE sequences, MAGD Homo sapiens cDNA for possible protein TRBD1, complete cds	
2890	10245	20095	1.22	2.0E-76 AW937985.1	NT	Human mRNA for possible protein TRBD1, complete cds	
319	10298	20112	3.65	3.0E-76 AW937985.1	NT	Human mRNA for possible protein TRBD1, complete cds	
339	10248	20113	3.66	2.0E-76 AW937985.1	NT	Human mRNA for possible protein TRBD1, complete cds	
453	10397	10397	2.17	4.0E-76 4057662 NT	Human sequins immunoglobulin (CD79A) binding protein 1 (CBP1) mRNA		
675	10513	20320	1.07	2.0E-76 4057662 NT	Human sequins glucose (GCG) mRNA		
1014	10832	20778	1.03	2.0E-76 4755039 NT	Human sequins GAN responsive element binding protein 1 (GREB1) mRNA		
1518	11423	21281	1.53	2.0E-76 4804029 NT	Human sequins GM2 ganglioside activator protein (GM2A) mRNA		
1518	11423	21282	1.53	2.0E-76 4804029 NT	Human sequins GM2 ganglioside activator protein (GM2A) mRNA		
1888	11782	21658	1.43	2.0E-76 AA253984.1	EST_HUMAN	z26011.21 Strategic sebaceous S11 Homo sapiens cDNA clone IMAGE:7018253	
2811	12740	22556	2.83	2.0E-76 222266 SWISSPROT	Olfactory receptor-like protein FG		
3257	13180	22979	2.01	2.0E-76 AAA44592.1	EST_HUMAN	zv06402.51 Sorensen testis, NT Homo sapiens cDNA clone IMAGE:7009605.3 similar to SW:ITB5_HUMAN	
3257	13180	22990	2.01	2.0E-76 AAA44592.1	EST_HUMAN	zv06402.51 Sorensen testis, NT Homo sapiens cDNA clone IMAGE:7009605.3 similar to SW:ITB5_HUMAN	
4043	10245	20095	0.94	2.0E-76 AW937985.1	NT	Human mRNA for possible protein TRBD1, complete cds	
4957	17477	24527	6.33	2.0E-76 AW937985.1	EST_HUMAN	QV2-O70028-22930-325-b1 O70028_Human testis cDNA	
5068	14058	24710	1.25	2.0E-76 AB25004.1	NT	Human sequins EGFR-like repetitive and codon-1-like domains 3 (EDIL3), mRNA	
5453	15374	28432	4.74	2.0E-76 AB25004.1	NT	Human sequins mRNA for KIAA0851 protein, partial cds	
6518	16377	26554	1.70	2.0E-76 11427410 NT	Human sequins TBC88a protein (HSTPGR88), mRNA		
7898	17748	27988	3.28	2.0E-76 11437211 NT	Human sequins similar to ribosomal protein S226 (H. sapiens) (LOC33150), mRNA		
8293	18172	28416	2.70	2.0E-76 74546907 NT	Human sequins HIRA, interacting protein 4 (cdna-like) (HIRP4), mRNA		
4220	14100	23861	2.18	1.0E-76 038874.1	NT	Human mRNA for HMG-1, complete cds	
4220	14100	23882	2.18	1.0E-76 038874.1	NT	Human mRNA for HMG-1, complete cds	
5345	15298	25093	5.29	NT	601169086251 NIH_3T3_Human testis cDNA clone IMAGE:35448925		
6137	15084	26119	3.98	9.0E-07 BEFB88505.1	EST_HUMAN	601161242351 NIH_MCF_7_Human testis cDNA clone IMAGE:419563727	
4421	14315	24101	1.65	8.0E-07 BEFB005181.1	EST_HUMAN	60116582651 NIH_MCF_7_Human testis cDNA clone IMAGE:4195635	

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NC:	ORF SEQ ID NC:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
							Top Hit	Top Hit
6347	16268	28606	2.46	8.0E-77	4506250	NT	Homo sapiens proteasome (prosome, macrophain) 26S subunit, non-ATPase, 7 (Mc34 homolog) (FSMD7)	mRNA
6851	18578	286861	2.12	8.0E-77	AA01970.1	EST HUMAN	Squares celera Nt2c-HR Homo sapiens cDNA clone IMAGE:35357578 5'	mRNA
8651	18578	28682	2.12	8.0E-77	AA01970.1	EST HUMAN	Squares celera Nt2c-HR Homo sapiens cDNA clone IMAGE:35357578 5'	mRNA
9771	192882	282522	7.26	8.0E-77	AA02465.1	EST HUMAN	yadra4.1 squares celera liver spleen INF55 Homo sapiens cDNA clone IMAGE:1290973 similar to contains MERT1 repetitive element;	mRNA
1687	11783	21689	3.28	7.0E-77	AA0267955.1	EST HUMAN	zdu1 (g1.1) Squares testis NH1 Homo sapiens cDNA clone IMAGE:1453922 3'	mRNA
2260	12240	22136	2.1	7.0E-77	4506044	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E, 250D (POLR2E) mRNA	mRNA
2602	10227	20643	4.29	6.0E-77	4506044	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E, 250D (POLR2E) mRNA	mRNA
1126	11040	20891	0.9	6.0E-77	AA0967755.1	EST HUMAN	Homo sapiens interferon (alpha, beta, and omega) receptor 2 (IFNAR2) mRNA	mRNA
1624	11429	21287	17.64	6.0E-77	AA040985.1	EST HUMAN	Homo sapiens resequencies, MAGE Home sapiens cDNA clone IMAGE:17450633 3'	mRNA
1216	11124	20973	1.78	6.0E-77	AA041015.1	NT	7 Homo sapiens glucokinase (GCK) gene, exon 2	mRNA
1337	11243	21111	1.16	6.0E-77	4506250	NT	Homo sapiens dihydrofolate reductase domain 10 (ADAM10) mRNA	mRNA
2738	12958	22452	0.97	6.0E-77	4506160	NT	Homo sapiens cathepsin L1 (COL1) mRNA	mRNA
4805	14463	24280	2.02	6.0E-77	5031660	NT	Homo sapiens EGFR-like repeats and discoidin-like domains 3 (ED1.3), mRNA	mRNA
4806	14463	24281	2.02	6.0E-77	5031660	NT	Homo sapiens EGFR-like repeats and discoidin-like domains 3 (ED1.3), mRNA	mRNA
4853	14733	24514	2.05	6.0E-77	AA0445603.1	EST HUMAN	DKZ041401728 r 434 (synonym: h353; gene: DKZ041401728 5'	mRNA
6873	16762	23947	1.39	6.0E-77	1142989	NT	Homo sapiens 3-(hydroxybutyryl)-Coenzyme A hydrolase (H3C-H), mRNA	mRNA
6873	16762	23948	1.39	6.0E-77	1142989	NT	Homo sapiens 3-(hydroxybutyryl)-Coenzyme A hydrolase (H3C-H), mRNA	mRNA
7519	17338	27643	2.56	6.0E-77	1142925	NT	Homo sapiens sorting motif 5 (SNX5), mRNA	mRNA
7519	17338	27544	2.55	6.0E-77	1142928	NT	Homo sapiens sorting motif 5 (SNX5), mRNA	mRNA
7690	17840	28690	1.95	6.0E-77	AB0012207.1	NT	Human mRNA for KIAA0209 gene, partial cds	mRNA
7890	17940	28581	1.90	6.0E-77	AB0012297.1	NT	Human mRNA for KIAA0209 gene, partial cds	mRNA
1929	11824	21705	1.12	3.0E-77	6730008	NT	Homo sapiens SET domain and meiann transposase fusion gene (SETMAR), mRNA	mRNA
1620	11824	21706	1.12	3.0E-77	6730008	NT	Homo sapiens SET domain and meiann transposase fusion gene (SETMAR), mRNA	mRNA
8249	18129	28377	3.31	3.0E-77	BP2509717.1	EST HUMAN	FMS-MT010-B428080-005-003 M100726 Homo sapiens cDNA clone B428080-005-003	mRNA
1339	11237	21093	1.71	2.0E-77	AY764671.1	EST HUMAN	AP45617 ANDS Homo sapiens cDNA clone D5S1710	mRNA
1414	11230	21168	1.73	2.0E-77	AY764671.1	EST HUMAN	FCS-BN065-17200211-Hb1 Endothelial Home sapiens cDNA	mRNA
2044	11839	21850	0.84	2.0E-77	LA1825.1	NT	Homo sapiens CYP17 gene, 5' end	mRNA
2056	11842	21842	2.64	2.0E-77	7702316	NT	Homo sapiens CGB-7 protein (LOC161834), mRNA	mRNA
2549	12724	22312	2.02	2.0E-77	AB037836.1	NT	Homo sapiens cDNA for KIAA1415 protein, partial cds	mRNA
2549	12724	22313	2.02	2.0E-77	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds	mRNA

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Probe SEQ ID NC:	Exon SEQ ID NC:	ORF SEQ ID NO:	Expression Signal Value	Most Similar BLAST E Value	Top Hit Assessment No.	Top Hit Database Source	Top Hit Description
3947	13856	29529	1.33	2.0E-77	BE04316.1	EST_HUMAN	Ihc4305_x1 Scores: NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:3040113 3' similar to SW-GAG2_HUMAN_P10264 RETROVIRUS-RELATED GAG POLYPROTEIN ;
4315	14212	23905	0.89	2.0E-77	A161359.1	EST_HUMAN	W22012_x1 NC1_CGAP_Bm52_Human sapiens cDNA clone IMAGE:22694465 3' similar to TR_0826245
4315	14212	23968	0.89	2.0E-77	A161359.1	EST_HUMAN	W22012_x1 NC1_CGAP_Bm52_Human sapiens cDNA clone IMAGE:22694466 3' similar to TR_0826245
4462	14886		3.48	2.0E-77	4504098	NT	Human sapiens glutamic-oxaloacetic transaminase 2, mitochondrial [aspartate aminotransferase 2] (GOT2), nuclear gene encoding mitochondrial protein, mRNA
4659	14546	24334	3.58	2.0E-77	A1653025.1	EST_HUMAN	res9912_1 st NC1_CGAP_Pt_Human sapiens cDNA clone IMAGE:116883 similar to SVR_RL29_HUMAN
5025	15540	26929	1.8	2.0E-77	BE2269840.1	EST_HUMAN	P47614_005_RIBOSOME PROTEIN_150C_1 contains element MSK1 repetitive element;
5745	15653	25781	1.34	2.0E-77	BE7871431	EST_HUMAN	60711685282F1_NHL_M6C_17 Human sapiens cDNA clone IMAGE:30294365 5'
6237	16123	22276	12.74	2.0E-77	A1633003.1	EST_HUMAN	a747469_1 Barley/cold cDNA clone IMAGE:38705805 5'
7459	17350	27564	4.98	2.0E-77	U03221.1	NT	O13511_TAK1-BINDING PROTEIN_TBP_1st_1;
7459	17350	27565	4.99	2.0E-77	U03221.1	NT	Human protein kinase C substrate 80-(K-H)PRKC(S)-H gene, exon 7
37	10224	19821	0.97	1.0E-77	AB033102.1	NT	Human sapiens mRNA for KIAA1276 protein, partial cds
37	10224	19822	0.97	1.0E-77	AB033102.1	NT	Human sapiens mRNA for KIAA1276 protein, partial cds
271	10237	22054	1.87	1.0E-77	4502166	NT	Human sapiens amyloid beta (A4) precursor protein (protease inhibitor, Alzheimer disease) (APP), mRNA
271	10237	20065	1.87	1.0E-77	4502166	NT	Human sapiens amyloid beta (A4) precursor protein (protease inhibitor, Alzheimer disease) (APP), mRNA
887	12676	20635	4.95	1.0E-77	4502166	NT	Human sapiens amyloid beta (A4) precursor protein (protease inhibitor, Alzheimer disease) (APP), mRNA
887	12679	20636	4.95	1.0E-77	4502166	NT	Human sapiens amyloid beta (A4) precursor protein (protease inhibitor, Alzheimer disease) (APP), mRNA
2384	12272	22168	1.22	1.0E-77	A0202024.1	NT	Human sapiens mRNA for KIAA1101 protein, complete cds
3007	12345	22727	2.82	1.0E-77	4503300	NT	Human sapiens 2-L-idonat CoA reductase 1, mitochondrial (DECR1), mRNA
4256	14156	23930	2.99	1.0E-77	7702269	NT	Human sapiens CG386 protein (LOC10250), mRNA
4423	14317	24103	14.73	1.0E-77	A1228041.1	NT	Human sapiens G5P binding between AML1 and CBF1 on chromosome 21q22; segment 17/3
4552	14446	24229	1.96	1.0E-77	6552322	NT	Human sapiens breast cancer 1, early onset (BRCA1-econ1), transcript variant BRCA1-econ1, mRNA
5179	15043	24810	2.89	1.0E-77	AV1755254.1	EST_HUMAN	CMTX5 Human cardiac muscle expression library Homo sapiens cDNA clone 415193 similar to CNTYA5 Cardiomyopathy associated gene 5

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
6510 15525	26507	1.93	1.0E-77	A 0585944.1	NT	Human dynactin 1 (DCTN1) gene, exon 27 and 28
6510 15525	26503	1.95	1.0E-77	M 58544.1	NT	Human capillins dynactin 1 (DCTN1) gene, exons 27 and 28
6509 15525	26508	1.56	1.0E-77	M 58544.1	NT	Human capillins dynactin 1 (DCTN1) gene, exon 20
6517 15957	28059	11.39	5.68E-142	N T	Human capillins dynactin 1 (DCTN1) gene, exon 20	
8002 17852	28063	1.22	1.0E-77	A 0585956.1	NT	Human capillins dynactin 1 (DCTN1) gene, exon 20
8002 17852	28064	1.22	1.0E-77	A 0585956.1	NT	Human capillins dynactin 1 (DCTN1) gene, exon 20
8013 17853	28109	2.53	1.0E-76	A V753502.1	EST_HUMAN	RC3-C70284-2805956-01+05 C70284-Homo sapiens cDNA
6509 15795	25907	2.97	6.0E-76	A V75061.1	EST_HUMAN	RC3-E70284-0505956-05 E70284-Homo sapiens cDNA
6509 15795	25908	2.97	6.0E-76	A V75061.1	EST_HUMAN	RC3-E70284-0505956-05 E70284-Homo sapiens cDNA
80 10064	19881	1.83	6.0E-76	A U118769.1	EST_HUMAN	AUT18769_HM18A_Homo sapiens cDNA clone [HE]BA1005345
80 10064	19882	1.83	6.0E-76	A U118769.1	EST_HUMAN	AUT18769_HM18A_Homo sapiens cDNA clone [HE]BA1005345
5950 16555	25650	2.51	6.0E-76	A V75210.1	EST_HUMAN	Human capillins GDNF family receptor alpha 1 (GFRalpha1), mRNA
211 10182	19996	1.1	6.0E-76	A V752496.1	EST_HUMAN	Human capillins hydrophilic protein FLJ15156 (FLJ11315), mRNA
2516 12889	22281	4.1	6.0E-76	A V753424.1	EST_HUMAN	ta8440_3y_NH_MOC_10_Homo sapiens cDNA clone [MGE-26040405 5' similar to MGE-26040405 5' similar to MGE-26040405 5' similar to MGE-26040405 5' similar to SW-WAP_PIG
3359 13259	23003	3.81	5.0E-76	M 558586.1	NT	Human collagen type I (COL1G3) gene, exon 6
6323 15243	25048	2.39	5.0E-76	A 0305856.1	NT	Human capillins basic/negatively charged protein mRNA, partial cds
6422 15443	25506	0.35	6.0E-76	A V750655.1	NT	Human capillins transforming growth factor beta beta-induced 6B10 (TGFB1), mRNA
6224 16110	28262	2.17	6.0E-76	A V75120.1	EST_HUMAN	ES365190_MAGE gene sequences, MAGE Home sapiens cDNA
7249 17126	27318	6.5	6.0E-76	U 05859.1	NT	Human lysosomal phosphatidylserine acyltransferase (LAMP2) gene, exon 7
1502 11405	21265	3.75	6.0E-76	B E900598.1	EST_HUMAN	601450601F1_NHL MCC_65 Homo sapiens cDNA clone [MAGE-3931887.5]
1629 11633	21393	1.6	6.0E-76	A 355641.1	NT	Novel human gene mapped to chromosome 11
2270 12154	22053	2.21	4.0E-78	A 0859504.1	EST_HUMAN	w97021x1_NCI_COGAP_K111_Homo sapiens cDNA clone [MAGE-2495615 3' similar to SW-WAP_PIG
4227 14125	23899	1.39	4.0E-78	T 07405.1	NT	C40955_WH1_ACIDIC PROTEIN PRECURSOR;
4694 14560	24340	1.27	4.0E-78	M 58596.1	NT	Human capillins pre-mRNA splicing factor (SF3B1) mRNA, complete cds
4694 14550	24341	1.27	4.0E-78	M 58596.1	NT	Human capillins pre-mRNA splicing factor (SF3B1) mRNA, complete cds
7867 17817	28058	1.94	4.0E-78	I 1560151.1	NT	Human capillins zinc finger protein FLJ122504 (FLJ122504), mRNA
6721 18638	26822	1.97	4.0E-78	A F71485.1	NT	Human capillins zinc finger protein FLJ122504 (FLJ122504), mRNA
8844 18656	28944	3	4.0E-78	A 058594.1	NT	Human transforming growth factor-beta1 precursor gene exons 4-5 (and pined mature peptide)
9894 19224	25239	2.85	4.0E-78	A 0511398.1	NT	Human capillins gene for AF-5, complete cds
155 10129	19944	1.6	3.0E-78	A F065601.1	NT	Human capillins gene for AF-5, complete cds

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Probe Seq ID No:	Exon Seq ID No:	ORF ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3882	18566	238352	1.2	8.0E-79	AL183210.2	NT	Human sapiens chromosome 21 segment HS21C010
4391	14287	240459	0.94	8.0E-79	D28476.1	NT	Human mRNA for KIAAD045 gene, complete cds
6107	19695	240670	0.94	8.0E-79	8567287	NT	Human sapiens protein (Drosophila) homolog (P943), mRNA
3274	15138	228411	1.4	8.0E-79	BE011948.1	EST_HUMAN	3014727651 NIH (MGC_58 Homo sapiens cDNA clone IMAGE:3877657 3' polyA+51 Scores: 71 live, spleen, INFILS, SH Human sapiens cDNA clone IMAGE:462558 3' similar to TR_Q15408 Q15408 NEUTRAL PROTEIN LARGE SUBUNIT T;
6040	18827	1129	6.0E-79	AAB96629.1	EST_HUMAN	NT	Human sapiens chromosome 21 segment HS21C012
8796	18601	288961	4.15	5.0E-79	AL183282.2	NT	Human sapiens hypothetical protein L17035 (EL10229), mRNA
3159	19304	1129	1.12	4.0E-79	8562225	NT	Human sapiens hypothetical protein L17035 (EL10229), mRNA
4948	14823	240950	1.33	4.0E-79	BF108861	EST_HUMAN	3018159221 NIH (MGC_54 Homo sapiens cDNA clone IMAGE:4710245 5'
310	10272	200913	1.4	3.0E-79	AF114485.1	NT	Human sapiens interleukin-1 receptor type I (IL1R1) mRNA, complete cds
962	10885	207353	2.98	3.0E-79	AF2242708.1	NT	Human sapiens cell-line tsx201 rho-like on current inducer protein YChn 1 gene, complete cds
3090	12987	222779	1.36	3.0E-79	U09101.1	NT	Human zinc finger protein ZNF131 mRNA, partial cds
5281	15212	250122	4.32	3.0E-79	AF110322.1	NT	Human sapiens mRNA for KIAA0829 protein, complete cds
5508	15424	254863	1.71	3.0E-79	AB020095.1	NT	Human sapiens mRNA for KIAA0829 protein, partial cds
5525	15442	255098	3.47	3.0E-79	11426770	NT	Human sapiens netrin 1 (NTN1), mRNA
5525	15442	255098	3.47	3.0E-79	11426770	NT	Human sapiens netrin 1 (NTN1), mRNA
6290	15980	260911	3.28	3.0E-79	AB014650.1	NT	Human sapiens mRNA for KIAA0620 protein, partial cds
6290	15980	260912	3.28	3.0E-79	AB014650.1	NT	Human sapiens mRNA for KIAA0620 protein, partial cds
6118	105955	220697	1.05	2.0E-79	BE378026.1	EST_HUMAN	3011594752 NIH (MGC_53 Homo sapiens cDNA clone IMAGE:351107 5'
912	10836	206865	1.14	2.0E-79	4757641	NT	Human sapiens BC2-like 2 (BC2.2) mRNA
1019	106327	1431	2.0E-79	AF523747.1	EST_HUMAN	111807_x1 NGI CGAP PrCB Human sapiens cDNA clone IMAGE:2118085 3'	
2101	11980	219880	14.14	2.0E-79	4586983	NT	Human sapiens phosphodiesterase 6A, GMP-AMP-specific, rod, alpha (PDE6A), mRNA
2101	11980	219880	14.14	2.0E-79	4586983	NT	Human sapiens phosphodiesterase 6A, GMP-AMP-specific, rod, alpha (PDE6A), mRNA
2148	120344	218911	0.99	2.0E-79	AJ271108.1	NT	Human sapiens mRNA for Faf-1 (Faf-1 gene)
2265	12149	220460	1.54	2.0E-79	AF244138.1	NT	Human sapiens hepatocellular carcinoma-associated antigen 88 (HCA88) mRNA, complete cds
3888	13749	238422	0.86	2.0E-79	AF170402.1	NT	Human sapiens mRNA for Faf-associated factor FAf-1 (Faf-1 gene)
4074	13976	237755	1.17	2.0E-79	AJ271448.1	NT	Human sapiens chromosome 21 segment HS21C008
4580	14478	242655	0.99	2.0E-79	AF163262.6	NT	Human sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
6251	16117	262707	1.83	2.0E-79	7382749	NT	Human sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
6251	16117	262711	1.83	2.0E-79	7382749	NT	Human sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
6695	16834	270209	2.61	2.0E-79	11427428	NT	HAD015170 putative cytoskeletal protein [Human, thyroid, mRNA_3011] mRNA
7898	17638	279565	1.44	2.0E-79	S72869.1	NT	HAD015170 putative cytoskeletal protein [Human, thyroid, mRNA_3011] mRNA
7898	17638	279565	1.44	2.0E-79	S72869.1	NT	HAD015170 putative cytoskeletal protein [Human, thyroid, mRNA_3011] mRNA

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Probe SEQ ID NC:	Exon SEQ ID NC:	CRF SEQ ID NC:	Expression Signal	Most Similar BLAST Hit (Top) F Value	Top HR Accession No.	Top Hit Database Source	Top Hit Descriptor
8391 18267	28516	4.22	2.0E-79	BE064396.1	EST_HUMAN	RC1-BT0310-16030-015-40	BT0310 Homo sapiens cDNA
8391 18267	28517	4.22	2.0E-79	BE064396.1	EST_HUMAN	RC4-BT0310-11000-015-40	BT0310 Homo sapiens cDNA
9078 15065	24888	2.6	2.0E-79	70512397 INT	Homo sapiens mRNA for KIAA0879 protein, partial cds		
9161 18097	25341	4.23	2.0E-79	AB209640.1	NT		
9351 19050	25307	1.98	2.0E-79	114149322 INT	Homo sapiens cadherin EGFR-LAG sevenless G-protein coupled receptor 1 (CE1_SR1), mRNA		
9877 19456	19456	2.78	1.0E-79	BF385071.1	EST_HUMAN	BF385071.1 NN0087 Homo sapiens cDNA	
8864 18704	28668	2.74	1.0E-79	BF087405.1	EST_HUMAN	GIV2-H-T0540-20000-558-a05 HT0540 Homo sapiens cDNA	
3107 13033	22829	3.79	9.0E-80	EST_HUMAN	EST_HUMAN	a/23c05.5.1 Source: Beta 1 NT Homo sapiens cDNA clone 134846.3	
3107 13033	22830	3.75	9.0E-80	AA725848.1	EST_HUMAN	a/23c05.5.1 Source: Beta 1 NT Homo sapiens cDNA clone 134846.3	
7751 17001	27824	1.28	5.0E-80	BF798603.1	EST_HUMAN	20108765271 NH1-MC-7 Homo sapiens cDNA clone IMAGE-5938601 8'	
8597 18464	28755	11.05	9.0E-80	11432624 INT	Homo sapiens solute carrier family 7 (cationic amino acid transporter, y ⁺ system), member 8 (SLC7A8), mRNA		
8597 18464	28756	11.05	9.0E-80	11432624 INT	Homo sapiens solute carrier family 7 (cationic amino acid transporter, y ⁺ system), member 8 (SLC7A8), mRNA		
3851 13006						Homo sapiens Y chromosome spermatogenesis candidate protein (REMAP) pseudogene mRNA, partial cds	
6445 16543	28512	2.83	8.0E-80	11422647 INT	Homo sapiens KIAA0724 gene product (KIAA0724), mRNA		
6445 16543	28513	2.83	8.0E-80	11422647 INT	Homo sapiens KIAA0724 gene product (KIAA0724), mRNA		
7409 17276	21421	1.19	8.0E-80	6005921 INT	Homo sapiens triple functional domain (PFF/F interacting) (TRIF), mRNA		
7409 17276	21433	1.19	8.0E-80	6005921 INT	Homo sapiens triple functional domain (PFF/F interacting) (TRIF), mRNA		
852 10808	20687	2.34	6.0E-80	AA122197.1	EST_HUMAN	ITGB6D2-x1 NCLGAP-Bnd23 Homo sapiens cDNA clone IMAGE-2103459 3' similar to SWNUEM_HUMAN C16795 NADH-U-BRUVINONE OXIDOREDUCTASE 39 kD SUBUNIT PRECURSOR :	
1624 11520	21396	2.05	6.0E-80	AA184961.1	NT	Homo sapiens NRD, complementary mRNA, complete cds	
4198 14088	23865	1.09	6.0E-80	AB0325861.1	NT	Homo sapiens mRNA for KIAA1165 protein, partial cds	
4198 14088	23866	1.09	6.0E-80	AB0325861.1	NT	Homo sapiens mRNA for KIAA1165 protein, partial cds	
6545 15461	28452	4.01	6.0E-80	1142-4622 INT	Homo sapiens mRNA miRNA-like polyadenylate 2, AL (mitochondrial), mRNA		
6702 15610	28712	2.59	5.0E-80	AJ404468.1	NT	Homo sapiens mRNA for dynamin heavy chain (DNACH1) gene	
5778 14683	28701	2.84	6.0E-80	11438276 INT	Homo sapiens fibfilin protein 3 (FLJ23323), mRNA		
7123 17000	27101	3.07	6.0E-80	115262454 INT	Homo sapiens G protein-coupled receptor 61 (GPR61), mRNA		
7123 17000	27102	3.07	6.0E-80	115262454 INT	Homo sapiens G protein-coupled receptor 61 (GPR61), mRNA		
7214 17091	27281	1.74	6.0E-80	AL165301.2 INT	Homo sapiens chondromuc 21 segment HS21C101		
7672 17822	27748	1.68	6.0E-80	U220211.1 INT	Lumican gene phosphotyrosine kinase substrate alpha' subunit gene, exon 21		
6311 16188	29457	2.91	6.0E-80	11427356 INT	Homo sapiens briefcase A-inhibited gastrin nucleotide-exchange protein 1 (BEG1), mRNA		

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Single Exon Primers Expressed

Single Exon Promoters Expressed in Heart

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID NC:	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal	Most Similar Top Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
<i>Intr112.6 NCL CGAP_C66 Homo sapiens cDNA clone IMAGE:1073495 3' similar to contains OFR.11 ORF repetitive element;</i>							
1911	11906		3.13	1.0E-90	AJ732658.1	EST HUMAN	<i>Homo sapiens cullin-4A (CUL4A) mRNA, complete cds</i>
45956	14254	246319	0.86	1.0E-80	AJ732688.1	NT	<i>Homo sapiens dihydrofolate reductase 2, segment Hs21.C078</i>
5102	16955	246119	0.97	1.0E-80	AF175576.1	EST HUMAN	<i>Homo sapiens dihydrofolate reductase (HMG-C6) [MGE:154535 6</i>
62855	16187	5.03	1.0E-80	AB338091.1	EST HUMAN	<i>Human proline-rich tyrosine oligopeptidase (COX1) gene exons 1-5, complete cds</i>	
55333	16547	6.41	1.0E-80	L10347.1	NT	<i>Homo sapiens male dehydrogenase 2, NAD (mitochondrial) (ND2), nuclear gene encoding mitochondrial protein, mRNA</i>	
5016	18822	260447	1.6	1.0E-90	5174640	NT	<i>Wip2 docks NCL CGAP_C66 Homo sapiens cDNA clone IMAGE:2472299 3'</i>
6470	16539	264553	2.08	1.0E-80	AB105731.1	EST HUMAN	<i>Wip2 docks NCL CGAP_C66 Homo sapiens cDNA clone IMAGE:2472299 3'</i>
6470	16339	264677	2.08	1.0E-80	AB104873.1	EST HUMAN	<i>Homo sapiens probable mannosidase binding C-type lectin DC-SIGNR mRNA, complete cds</i>
7350	17218	274118	1.23	1.0E-80	AF245218.1	NT	<i>Homo sapiens probable mannosidase binding C-type lectin DC-SIGNR mRNA, complete cds</i>
7857	17807	280449	1.19	1.0E-80	DB34792.2	NT	<i>Homo sapiens mRNA for KIAA0145 (retinol, cellular esterification protein)</i>
8044	17945	281653	7.42	1.0E-80	11641276	NT	<i>Homo sapiens similar to rat myoregulin (LOC416182), mRNA</i>
8044	17944	281914	7.42	1.0E-80	11641276	NT	<i>Homo sapiens similar to rat myoregulin (LOC416182), mRNA</i>
9443	18079	262628	1.45	1.0E-80	11417801	NT	<i>Homo sapiens mRNA for KIAA0833 protein, partial cds</i>
9443	18211	252558	1.85	1.0E-80	AB012049.1	NT	<i>Homo sapiens mRNA for KIAA0833 protein, partial cds</i>
9670	18220	18220	1.99	1.0E-80	AB011396.1	NT	<i>Homo sapiens gene for AF-6, complete cds</i>
8691	17922	28212	2.35	6.0E-81	AB251752.1	EST HUMAN	<i>Shog95px1t Stored NE_T GBC_S1 Homo sapiens cDNA clone IMAGE:1854286 3'</i>
8071	17892	28213	2.38	6.0E-81	AB251752.1	EST HUMAN	<i>Shog95px1t Stored NE_T GBC_S1 Homo sapiens cDNA clone IMAGE:1854286 3'</i>
8494	18347	28831	4.95	8.0E-81	BE384258.1	EST HUMAN	<i>MGC_44 Homo sapiens cDNA clone IMAGE:3632070 5'</i>
6500	18154	26521	3.05	7.0E-81	AB251215.1	EST HUMAN	<i>zastf08.25 Stores feline MHC_18 Homo sapiens cDNA clone IMAGE:3328640 6'</i>
4250	14158	23897	4.84	6.0E-81	BE286258.1	EST HUMAN	<i>8011119707F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3328640 6'</i>
4250	14188	238972	4.84	6.0E-81	BE252628.1	EST HUMAN	<i>8011119707F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3328640 6'</i>
5229	16153	24820	1.93	6.0E-81	4501848	NT	<i>Homo sapiens ATP-binding cassette, subfamily A (ABC1), member 3 (ABCA3), mRNA</i>
7325	17201	27401	1.34	6.0E-81	AA380017.1	EST HUMAN	<i>E5769129 Fetal lung (Homo sapiens) cassette, subfamily A (ABC1), member 3 (ABCA3), mRNA</i>
9670	18156	242619	1.82	6.0E-81	BB1567022.1	EST HUMAN	<i>8021356568F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:2524601 5'</i>
9670	19166	252770	1.82	6.0E-81	BB1567022.1	EST HUMAN	<i>8021356568F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:2524601 5'</i>
2170	12037	21800	3.14	6.0E-81	BC238042.1	EST HUMAN	<i>8011195005F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:33454540 6'</i>
6601	16780	26974	5.07	6.0E-81	AB307025.1	NT	<i>Homo sapiens mRNA for KIAA0654 protein, partial cds</i>
6601	16730	26975	3.47	5.0E-81	AB307025.1	NT	<i>Homo sapiens mRNA for KIAA0654 protein, partial cds</i>
8865	16877	26986	2.61	5.0E-81	9568634	NT	<i>Homo sapiens hypothetical protein (EL1130105), mRNA</i>
214	10195	19598	0.87	4.0E-81	AB262257.1	NT	<i>Homo sapiens CRP2 binding protein mRNA, partial cds</i>

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Probe Seq ID No.	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1779	11678	21556	0.99	4.0E-81	AW770612.1	EST_HUMAN	hrsgd021 NC_ CGAP -Cot14 Homo sapiens cDNA clone IMAGE:3035607 3' similar to SW:CGP_B0WV
3134	13069	22656	3.79	4.0E-81	AB037765.1	NT	Homo sapiens mRNA for KIAA345 protein, partial cds
3576	13490	23290	1.18	4.0E-81	AW004608.1	EST_HUMAN	west031 NC_ CGAP _C3 Homo sapiens cDNA clone IMAGE:2505090 3' similar to TR-O43815 O43815
4058	13970	23746	2.14	4.0E-81	AF265306.1	NT	STRATIN : Homo sapiens rat3 interacting protein variant 2 mRNA, partial cds
4059	13970	23747	2.14	4.0E-81	AF265306.1	NT	Homo sapiens rats3 interacting protein variant 2 mRNA, partial cds
6621	16700	29563	2.16	4.0E-81	X65096.1	NT	Human mRNA for myotactin (MSTN) protein
6673	16850	27041	3.4	4.0E-81	U20197.1	NT	Human tissue plasminogen activator gene, exon 2 and 3
6673	16850	27042	3.4	4.0E-81	U20197.1	NT	Human gene for prothrombinase gene, alpha subunit gene, exons 2 and 3
7320	17108	27356	5.65	4.0E-81	AB018501.1	NT	Homo sapiens mRNA for Death-associated protein kinase 2, complete cds
7816	17686	27506	1.49	4.0E-81	U1425281.NT	EST_HUMAN	Homo sapiens lgs1ex1, DNA, A1P-dependent (L(G1), mRNA
8522	18594	28938	2.24	4.0E-81	AF590505.NT	EST_HUMAN	Homo sapiens vesicle trafficking protein sec22b (SEC22B) mRNA
8522	18594	18394	2.24	4.0E-81	AF590505.NT	EST_HUMAN	Homo sapiens cadherin binding protein (KIAA0380), mRNA
9069	19627	28007	3.81	4.0E-81	U1417862.NT	EST_HUMAN	Human cadherin binding protein (KIAA0380), mRNA
9069	19627	28008	3.81	4.0E-81	U1417862.NT	EST_HUMAN	Homo sapiens cathepsin D-like protease (LOC557733), mRNA
9612	19761	26253	2.52	4.0E-81	U1417871.NT	EST_HUMAN	Homo sapiens beta-reidoporphosine (LOC557733), mRNA
9812	19761	26254	2.52	4.0E-81	U1417871.NT	EST_HUMAN	Homo sapiens beta-reidoporphosine (LOC557733), mRNA
9780	19276	28528	2.57	4.0E-81	U1417974.NT	EST_HUMAN	Homo sapiens transducin subunit gamma [TGN2], mRNA
1246	11168	21000	9.36	3.0E-81	Y18000.1	NT	Homo sapiens NF2 gene
1246	11168	21001	9.36	3.0E-81	Y18001.1	NT	Homo sapiens NF2 gene
2323	12201	22110	1.7	3.0E-81	AF577148.1	NT	Homo sapiens caly144 (CLU44) mRNA, complete cds
2981	12888	22685	5.12	3.0E-81	AF90290.NT	EST_HUMAN	Homo sapiens plakophilin (heparin binding growth factor 8, heparin growth-promoting factor 1) (PTN) mRNA
2981	12886	22686	5.12	3.0E-81	AF60280.NT	EST_HUMAN	Homo sapiens chromozone 21 segment 1S27C033
4933	14811	0.87	3.0E-81	AL195793.2	EST_HUMAN	60147402751.NR_1.HGNC_61 Homo sapiens cDNA clone IMAGE:3877121_5'	
2902	12732	22650	1.77	2.0E-81	BE784593.1	EST_HUMAN	Homo sapiens chromozone 21 segment 1S27C033
2802	12732	22651	1.77	2.0E-81	BE784593.1	EST_HUMAN	60147402751.NR_1.HGNC_61 Homo sapiens cDNA clone IMAGE:3877121_5'
3707	13620	23404	0.98	2.0E-81	AW671542.1	EST_HUMAN	hg35c01_x1 NC_ CGAP_Kid11 Homo sapiens platelet-derived growth factor receptor-like (PDGFR) mRNA
4579	14469	24255	0.85	2.0E-81	AF553871.NT	EST_HUMAN	hg35c01_x1 NC_ CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2952384_3'
9888	13920	23404	1.74	2.0E-81	AW671542.1	EST_HUMAN	Homo sapiens platelet-derived growth factor receptor-like (PDGFR) mRNA
9896	19076	26134	1.36	2.0E-81	8557387.NT	EST_HUMAN	3383 Human retina cDNA randomly primed cDNA library/Homo sapiens cDNA
1403	11308	21139	3.32	1.0E-81	W265383.1	EST_HUMAN	

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Probe Seq ID No.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3602	13516	23904	2	1.0E-81	AV060568.1	EST_HUMAN	EST/T37279 MAGE sequences. MAGE/Homo sapiens cDNA clone IMAGE:485825 5' similar to 24.5m09.11 Seraes, pregnant uterus. NIH3T3/Homo sapiens cDNA clone IMAGE:485825 5'
4414	14308	24091	3.07	1.0E-81	NCI-52437 CDP-diacylglycerol synthase - full length.	EST_HUMAN	745c04-1 NCI-52437 CDP-diacylglycerol synthase - full length.
4546	14439	24222	7.95	1.0E-81	BE4v70968.1	EST_HUMAN	Human acetyltransferase (ACO2) gene, exon 3
5203	15983	29103	9.03	1.0E-81	US797281	NT	Human acetyltransferase (ACO2) gene, gamma (POLG), mRNA
6284	18206	24852	4.01	1.0E-81	11432666	NT	Homo sapiens polymerase (DNA directed) gamma (POLG), mRNA
6284	18206	24852	4.01	1.0E-81	11432666	NT	Homo sapiens anti-repeat protein NR4A1/hepatocyte growth (CHNND2), mRNA, partial cds
5468	15388	25449	3.54	1.0E-81	UZ02551.1	NT	Homo sapiens arm-repeat protein NR4A1/hepatocyte growth (CHNND2), mRNA, partial cds
6468	15388	25450	3.54	1.0E-81	UZ02551.1	NT	Homo sapiens arm-repeat protein NR4A1/hepatocyte growth (CHNND2), mRNA, partial cds
5737	15945	26769	3.15	1.0E-81	BF7514441.1	EST_HUMAN	8073780491 NIH-MGC_93 Homo sapiens cDNA clone IMAGE:3214535 6'
6867	18425	28096	6.4	1.0E-81	11432666	NT	Homo sapiens polymerase (DNA directed) gamma (POLG), mRNA
7631	17482	27702	2.92	1.0E-81	BE91627827.1	EST_HUMAN	8071645051F1 NIH-MGC_56 Homo sapiens cDNA clone IMAGE:3930228 5'
7631	17482	27705	2.92	1.0E-81	BE91627827.1	EST_HUMAN	8071645051F1 NIH-MGC_56 Homo sapiens cDNA clone IMAGE:3930228 5'
7729	17578	27156	4.61	1.0E-81	BF56549467.1	EST_HUMAN	807134318657 NIH-MGC_53 Homo sapiens cDNA clone IMAGE:36583 5'
7819	17699	27059	2.93	1.0E-81	BF7445451.1	EST_HUMAN	80715753971 NIH-MGC_9 Homo sapiens cDNA clone IMAGE:3839290 5'
7819	17699	27510	2.93	1.0E-81	BF7445451.1	EST_HUMAN	80715753971 NIH-MGC_9 Homo sapiens cDNA clone IMAGE:3839290 5'
8000	17850	28091	1.46	1.0E-81	AV060568.1	EST_HUMAN	CMB:NN0056-1404005-147-1#1 NN0056-1404005-147-1#1 Homo sapiens cDNA
8458	18312	28568	1.96	1.0E-81	AV060568.1	EST_HUMAN	NIH-C010006-255989-019 C010006 Homo sapiens cDNA
8458	18312	28569	1.96	1.0E-81	AV060568.1	EST_HUMAN	NIH-C010006-255989-019 C010006 Homo sapiens cDNA
8594	13516	23904	2.42	1.0E-81	AV060568.1	EST_HUMAN	EST/T37279 MAGE sequences. MAGE/Homo sapiens cDNA clone IMAGE:485825 5'
8810	18624	28915	1.58	1.0E-81	BF204285.1	EST_HUMAN	8071607714F1 NIH-MGC_77 Homo sapiens cDNA clone IMAGE:4110456 5'
9278	15981	25525	3.92	1.0E-81	1141-8138	NT	Homo sapiens phosphotidylserine-specific protein B (mRNA editing protein) (D7.4C16.2), mRNA
12	9098	19789	1.87	8.0E-92	AF510466.1	NT	Homo sapiens HSPC288 mRNA, partial cds
101	9998	19786	1.29	8.0E-92	AF510466.1	NT	Homo sapiens HSPC288 mRNA, partial cds
263	10228	20044	1.66	8.0E-92	US089868.1	NT	Human GREB1 gene, partial cds
797	10726	20568	2.17	8.0E-92	US089868.1	NT	Human GREB1 gene, partial cds
869	10755	20645	1.11	8.0E-92	US089868.1	NT	Human GREB1 gene, partial cds
1475	11380	21244	1.12	8.0E-92	A3037748.1	NT	Human greb1 gene mRNA for KIAA1327 protein, partial cds
1586	11540	21400	1.24	8.0E-92	6715601	NT	Homo sapiens glutathione peroxidase 5 (cysteine residue-related protein) (GPX5), transcript variant 2, mRNA
1450	14030	23825	0.81	8.0E-92	8923232	EST_HUMAN	8073780491 NIH-MGC_93 Homo sapiens cDNA clone IMAGE:3214535 5'
1434	13393	21391	1.27	7.0E-92	BF025527.1	EST_HUMAN	0014408531F1 NIH-MGC_86 Homo sapiens cDNA clone IMAGE:3930228 5'
2739	12801	22495	1.82	7.0E-92	AU144050	EST_HUMAN	AU144050 HEMBA:0007652.3
4034	15937	23713	0.91	5.0E-92	A515572.1	EST_HUMAN	Wheb11a1 NC1 CGAP_C03 Homo sapiens cDNA clone IMAGE:323196 3'

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Match Similar BLAST E Value	Top Hit Assession No.	Top Hit Database Source	Top Hit Descriptor
1647	11651	21412	6.51	4.0E-02 AF061484.1	NT	Hom sapiens alpha-tubulin isoform 1 mRNA, complete cds	NP_076011.1; Homo sapiens presenilin-1 gene, exons 1 and 2 Q76276 PKD1 ;
8054	18781	20654	6.47	4.0E-02 AF062010.2	NT	Hom sapiens presenilin-1 gene, exons 1 and 2	NP_076011.1; Homo sapiens presenilin-1 gene, exons 1 and 2
9519	19130	6.19	4.0E-02 AF062010.2	NT	Hom sapiens amyloid beta (A4) precursor protein (protease inhibitor, Alzheimer disease) (APP), mRNA	RC2-BN0120-010400-013-022 BN0120 Homo sapiens cDNA	
276	10242	20161	13.76	3.0E-02	4502166 INT	Hom sapiens transforming growth factor beta-activated kinase-binding protein (TAK1), mRNA	RC2-BN0120-010400-013-022 BN0120 Homo sapiens cDNA
687	10620	20446	2.19	3.0E-02 BE005705.1	EST_HUMAN	Hom sapiens transforming growth factor beta-activated kinase-binding protein (TAK1), mRNA	RC2-BN0120-010400-013-022 BN0120 Homo sapiens cDNA
770	10700	20339	4.41	3.0E-02	6174702 NT	Hom sapiens amyloid beta (A4) precursor protein (protease inhibitor, Alzheimer disease) (APP), mRNA	RC2-BN0120-010400-013-022 BN0120 Homo sapiens cDNA
862	10779	20929	3.22	3.0E-02	4502166 NT	Hom sapiens amyloid beta (A4) precursor protein (protease inhibitor, Alzheimer disease) (APP), mRNA	RC2-BN0120-010400-013-022 BN0120 Homo sapiens cDNA
1045	10963	13.76	3.0E-02	AJ728548.1	EST_HUMAN	Hom sapiens amyloid-beta precursor protein (APP), mRNA	RC2-BN0120-010400-013-022 BN0120 Homo sapiens cDNA
1333	11240	21068	5.47	3.0E-02	AV178973.1	Hom sapiens chromosome 21 cDNA clone 133618 3	RC2-BN0001-150100-021-B02 P70001 Homo sapiens cDNA
1450	11345	21219	2.03	3.0E-02	AL163285.2	Hom sapiens chromosome 21 cDNA clone 133618 3	RC2-BN0001-150100-021-B02 P70001 Homo sapiens cDNA
1486	11755	21380	1.32	3.0E-02	BE813522.1	Hom sapiens chromosome 21 cDNA clone 133618 3	RC2-BN0005-260700-018-004 BN0005 Homo sapiens cDNA
1981	11855	21744	0.9	3.0E-02	4501622 INT	Hom sapiens adenylyl cyclase activating polypeptide 1 (hiliary receptor type 1 (ACAP1) receptor type 1 (ACAP1PR1)), mRNA	RC2-BN0005-260700-018-004 BN0005 Homo sapiens cDNA
3224	13188	2.06	3.0E-02	5453811 NT	Hom sapiens macrophage lysozyme kinase, receptor, type 2 (NTRC2), mRNA	RC2-BN0005-260700-018-004 BN0005 Homo sapiens cDNA	
4858	14718	24304	0.91	3.0E-02 AA155970.1	EST_HUMAN	2m03b04.11 Streptococcus pneumoniae sRNA gene IMAGE_6657115 similar to SW_PACT_BOVIN_Q07537_POLYPEPTIDE_N-Acetylglucosaminyltransferase ;	2m03b04.11 Streptococcus pneumoniae sRNA gene IMAGE_6657115 similar to SW_PACT_BOVIN_Q07537_POLYPEPTIDE_N-Acetylglucosaminyltransferase ;
6738	18517	28907	2.84	3.0E-02 AA155970.1	NT	Hom sapiens amyloid-beta precursor protein 1 (ANPM1), mRNA	2m03b04.11 Streptococcus pneumoniae sRNA gene IMAGE_6657115 similar to SW_PACT_BOVIN_Q07537_POLYPEPTIDE_N-Acetylglucosaminyltransferase ;
7684	17504	27728	3.79	3.0E-02 AB029000.1	NT	Hom sapiens mRNA for KIAA1077 protein, partial cds	2m03b04.11 Streptococcus pneumoniae sRNA gene IMAGE_6657115 similar to SW_PACT_BOVIN_Q07537_POLYPEPTIDE_N-Acetylglucosaminyltransferase ;
7684	17504	27729	3.79	3.0E-02 AB029000.1	NT	Hom sapiens mRNA for KIAA1077 protein, partial cds	2m03b04.11 Streptococcus pneumoniae sRNA gene IMAGE_6657115 similar to SW_PACT_BOVIN_Q07537_POLYPEPTIDE_N-Acetylglucosaminyltransferase ;
592	10520	22326	1.92	2.0E-02 AB029316.1	NT	Hom sapiens mRNA for KIAA0959 protein, partial cds	2m03b04.11 Streptococcus pneumoniae sRNA gene IMAGE_6657115 similar to SW_PACT_BOVIN_Q07537_POLYPEPTIDE_N-Acetylglucosaminyltransferase ;
592	10520	20327	1.92	2.0E-02 AB029316.1	NT	Hom sapiens mRNA for KIAA0959 protein, partial cds	2m03b04.11 Streptococcus pneumoniae sRNA gene IMAGE_6657115 similar to SW_PACT_BOVIN_Q07537_POLYPEPTIDE_N-Acetylglucosaminyltransferase ;
1980	11562	21428	1.75	2.0E-02 AL046500.1	EST_HUMAN	DK-Zp4-M417.1; 434 (synonym: this3) Homo sapiens cDNA clone DK-Zp4-S4M17.5	DK-Zp4-M417.1; 434 (synonym: this3) Homo sapiens cDNA clone DK-Zp4-S4M17.5
3772	138644	23496	1.14	2.0E-02 D87975.1	NT	Hom sapiens mRNA for amyloid precursor protein, complete cds	DK-Zp4-M417.1; 434 (synonym: this3) Homo sapiens cDNA clone DK-Zp4-S4M17.5
4140	228165	1.14	2.0E-02	4501619 NT	Hom sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1), mRNA	DK-Zp4-M417.1; 434 (synonym: this3) Homo sapiens cDNA clone DK-Zp4-S4M17.5	
4458	14532	24449	0.98	2.0E-02 AB029019.1	NT	Hom sapiens mRNA for KIAA0956 protein, partial cds	DK-Zp4-M417.1; 434 (synonym: this3) Homo sapiens cDNA clone DK-Zp4-S4M17.5
4458	14532	24144	0.98	2.0E-02 AB029019.1	NT	Hom sapiens mRNA for KIAA0956 protein, partial cds	DK-Zp4-M417.1; 434 (synonym: this3) Homo sapiens cDNA clone DK-Zp4-S4M17.5
4768	14683	24441	3.18	2.0E-02 AF016565.1	NT	Hom sapiens whose1 (WBSCR1) and whose5 (WBSCR5) genes, complete cds; alternative spliced and implication factor C subunit 2 (NTRC2), mRNA, complete cds	DK-Zp4-M417.1; 434 (synonym: this3) Homo sapiens cDNA clone DK-Zp4-S4M17.5
5013	14897	246953	1.86	2.0E-02	45017580 NT	Hom sapiens tumor necrosis factor receptor superfamily, member 5 (TNFRSF5), mRNA	DK-Zp4-M417.1; 434 (synonym: this3) Homo sapiens cDNA clone DK-Zp4-S4M17.5
5013	14897	246541	1.96	2.0E-02	45017580 NT	Hom sapiens tumor necrosis factor receptor superfamily, member 5 (TNFRSF5), mRNA	DK-Zp4-M417.1; 434 (synonym: this3) Homo sapiens cDNA clone DK-Zp4-S4M17.5

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Probe SEQ ID NO.	Exon ID No. NC_	ORF Seq ID No: ID No:	Expression Signal Value	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5358	15278	25108	2.37	2.0E-82	A018270.1	NT	Homo sapiens mRNA for KIAA0727 protein, partial cds
5749	15854	25762	4.95	2.0E-82	A1254682.1	NT	Homo sapiens FAM11 splice variant 1 (FAM11) mRNA, complete cds
6834	16713	26006	2.23	2.0E-82	J1325170	NT	Homo sapiens sit (Drosophila) homolog 3 (SIT3) mRNA
7821	17911	27912	1.2	2.0E-82	Y08032.1	NT	Human endogenous retrovirus-K, LTR 15' and long gene
7821	17971	27913	1.2	2.0E-82	Y08032.1	NT	Human endogenous retrovirus-K, LTR 15' and long gene
8628	18463	28769	6.98	2.0E-82	U80738.1	NT	Homo sapiens CAGF6 mRNA, partial cds
8628	18463	28757	9.88	2.0E-82	U80738.1	NT	Homo sapiens CAGF6 mRNA, partial cds
9097	18869	223	2.23	2.0E-82	N84969.1	EST_HUMAN	U14510_11 Scores: parathyroid tumor_NCI_Homo sapiens cDNA clone IMAGE:3084053 3'
9932	19255	2.27	2.1E-82	A401127.1	EST_HUMAN	301961_1 Scores: fetal liver spleen_NCI_Homo sapiens cDNA clone IMAGE:4298985 5'	
9823	18398	1.44	2.0E-82	11545621	NT	Homo sapiens SRY (sex determining region Y-box 10 (SOX10)) mRNA	
977	10515	20321	1.45	1.0E-82	11545621	NT	Homo sapiens melanoma differentiation associated protein-5 (MDA5) mRNA
1190	11100	0.9	1.0E-82	BIE85506.1	EST_HUMAN	6015108592F1 NIH MGC_71 Homo sapiens cDNA clone IMAGE:3612207 5'	
1284	11171	21020	1.91	1.0E-82	BIE94986.1	EST_HUMAN	RC4-T0310-110300-015-10 BT0510 Homo sapiens cDNA
1285	11172	21021	0.33	1.0E-82	A80111012	NT	Homo sapiens mRNA for KIAA0539 protein, partial cds
7892	17722	1.38	1.0E-82	BF016838.1	EST_HUMAN	U14-BW1_400-03-01-LNC_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:3084053 3'	
8128	18016	28244	2.87	1.0E-82	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C009
8373	18250	28500	1.78	1.0E-82	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
7057	16634	27124	4.7	9.0E-83	BIE622200.1	EST_HUMAN	60261403F1 NIH MGC_81 Homo sapiens cDNA clone IMAGE:4294156 5'
1392	11297	21155	1.98	8.0E-83	B1535875.1	EST_HUMAN	60273340F1 NIH MGC_21 Homo sapiens cDNA clone IMAGE:4314325 5'
1856	12947	21422	1.98	8.0E-83	N898951.1	EST_HUMAN	2418712_51 Scores: fetal liver spleen_NCI_Homo sapiens cDNA clone IMAGE:2898523 3'
2884	12784		1.54	7.0E-83	AA16846455.1	EST_HUMAN	n01201_1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:11004697 3' similar to contains Ali repetitive element.
4710	14596		5.49	7.0E-83	BF221611.1	EST_HUMAN	f6a7d7-01 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:3647893 3' similar to TRQ30736 C093038
397	10343	20169	1.34	6.0E-83	M3320.1	NT	D20ZPH1_1
							Human platelet Gycoprotein IIb (GpIIb) gene, exons 2-29
1747	11647	21515	1.5	8.0E-83	AV73008.1	EST_HUMAN	f11103_x1 Scores: INF_T_GSC_S1 Homo sapiens cDNA clone IMAGE:26933525 3' similar to SW_YBEB_HAEIN P4471 HYPOTHLETIC PROTEIN HN0344;
2884	12912	22706	1.09	6.0E-83	AV1616405.1	EST_HUMAN	f12050_1 Scores: fetal liver spleen_NCI_Homo sapiens cDNA
3031	12559	22751	0.94	6.0E-83	AAT01451.1	EST_HUMAN	f12050_1 Scores: fetal liver spleen_NCI_Homo sapiens cDNA clone IMAGE:4556963 3'
3315	15431	23231	0.85	6.0E-83	6.0RNE-01	NT	f11103_x1 Scores: INF_T_J10379 (FL-J10379) mRNA
5246	15180	24928	1.72	6.0E-83	4527865	NT	Homo sapiens hypothetical protein f1 (vehicle-associated membrane protein)-associated protein A (33kDa) (VAPA) mRNA, and translated products
5669	15570	25979	2.13	6.0E-83	A0107070.1	NT	Homo sapiens hypoxia gene, exons 1-50
6450	12291	28452	1.79	6.0E-83	1142204	NT	Homo sapiens net proto-oncogene (leukocyte growth factor receptor) (MET) mRNA,

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Probe Seq ID No.	Exon ORF Seq ID No:	Expression Signal Value	Most Similar BLAST NT Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7678	17430	27644	6.777	6 DE-53	4905314 NT	Homo sapiens myomesin (M-protein) 2 (165kD) (Myo16k2) mRNA ab1-1e10_51 Stratagene lung (#037210) Homo sapiens cDNA clone IMAGE:6408103 similar to contains THR-L2 THR repetitive element;
8817	18630		6.32	6 DE-83	AA488705.1 EST_HUMAN	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds.
9050	18834		3.11	6 DE-53	AF246798.1 NT	Human succinate dehydrogenase iron-protein subunit (sdhB) gene, exon 5
9311	10856		4.14	5 DE-83	U17853.1 NT	Human succinate dehydrogenase regulatory subunit (SUQ2) mRNA, complete cds
2004	12494		2.1	5 DE-53	AF003306.1 NT	Human gene mapping to chromosome X
3568	13500	23269	0.92	5 DE-83	AL33207.2 NT	Human regions of cellular (CAT) 1 mRNA
5011	14868	24851	10.59	5 DE-53	455703.3 NT	Homo sapiens cathepsin C (CAT) 1 mRNA
5011	14868	24852	10.99	5 DE-53	4557013 NT	Homo sapiens thyroperoxidase 2 subunit (CATNCA2B1) gene, exon 11
5094	14864	24759	0.86	5 DE-83	AF083627.1 NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
624	10861	20373	1.47	4 DE-83	BEF860978.1 EST_HUMAN	601515160DF-1 NIH 3T3-Homo sapiens cDNA clone IMAGE:3913105_6
3469	13965	28190	0.66	4 DE-83	BEF860978.1 EST_HUMAN	ES794-2 Rhesus (Macaca mulatta) to simian to endogenous retrovirus ERV6 np87cd7_51 NC1 COGAP_Thy1 Homo sapiens cDNA clone IMAGE:1133292 similar to contains THR-L2 THR repetitive element;
891	10804		4.6	3 DE-53	AA395311.1 EST_HUMAN	601515160DF-1 NIH 3T3-Homo sapiens cDNA clone IMAGE:1133292 similar to contains THR-L2 THR repetitive element;
2750	12612		1.82	3 DE-83	AA632684.1 EST_HUMAN	ROSE-T0046-260600-01-LH12 E1/0046/Homo sapiens dDNA
1759	11686	21539	1.8	2 DE-53	AA869342.1 EST_HUMAN	Q02814 MYELICBLAST_KIAA0216_;
1769	11686	21630	1.9	2 DE-83	AA869342.1 EST_HUMAN	Q02814 MYELICBLAST_KIAA0216_;
1853	11779	21654	2.23	2 DE-53	NB9651.1 EST_HUMAN	Q02812-21 Source fetal liver spleen NB9651.1 Homo sapiens cDNA clone IMAGE:2265623_3'
2621	12750	22542	1.11	2 DE-83	BEC28694.1 EST_HUMAN	ROSE-T0046-260600-01-LH12 E1/0046/Homo sapiens dDNA
3231	13165		1.82	2 DE-53	AA1195894 NT	Homo sapiens enol (Imprerin) alias 1 (SAL1), mRNA
3708	13921		1	2 DE-53	AL162020.2 NT	Homo sapiens cathepsin D1 segment (F521Q02)
4241	14140	23916	4.47	2 DE-83	AF202879.1 NT	Homo sapiens hemopoietic progenitor cell antigen CD34 precursor (CD34) mRNA, partial cds
4653	14446	24230	8.13	2 DE-83	7703598 NT	Homo sapiens arylalkylamine N-acetyltransferase containing protein ASB-2 (LOC51076), mRNA
6559	15279	25169	23.36	2 DE-83	11025771 NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (M/H), mRNA
6559	15279	25110	23.36	2 DE-83	11025771 NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (M/H), mRNA
6306	16256	26419	5.9	2 DE-83	AF298533.1 NT	Homo sapiens F-box protein F2b (FBXO18) mRNA, partial cds
6659	16339	26736	1.62	2 DE-83	AF298507.1 NT	Rattus norvegicus dendin-180 mRNA, complete cds
6829	16718	26911	2.56	2 DE-83	AF011920.1 NT	Homo sapiens protein kinase C2 catalytic subunit sigma gene, exon 1
6839	16718	26912	2.56	2 DE-83	AF011920.1 NT	Homo sapiens protein kinase C2 catalytic subunit sigma gene, exon 1

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Probe Seq ID No:	Exon ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
7767	27845	3.32	2.0E-83	M22094.1	NT	Human neural cell adhesion molecule (NCAM) secreted isoform mRNA, 3' end	
7767	27845	3.32	2.0E-83	M22094.1	NT	Human neural cell adhesion molecule (NCAM) secreted isoform mRNA, 3' end	
7826	17617	2.16E-16	1.21	AU11659.1	EST_HUMAN	AK11659_Hs.61 Human sapient cDNA clone IMAGE1001510_5'	
8223	18105	2.65E-18	1.14E-83	BE034485.1	EST_HUMAN	Home sapiens cDNA clone IMAGE15135_5	
8228	18177	2.16E-16	1.32	AL134452.1	EST_HUMAN	DKFB2647_155_11_547 (synonym: hfr1) Human sapient cDNA clone DKFB2647_155_5	
6298	18177	2.16E-16	1.32	AL134452.1	EST_HUMAN	DKFB2647_155_11_547 (synonym: hfr1) Human sapient cDNA clone DKFB2647_155_5	
9667	18226	3.48	2.0E-83	AB011596.1	NT	Home sapiens gene for AF-6, complete cds	
1390	11295	21152	1.857	NT	NT	Home sapiens hydroxyl-Coenzyme A lyase/Coenzyme A thiolester-Coenzyme A hydrolase (thioesterase protein), testis isoenzyme (hfr1-B) mRNA	
1390	11295	21153	16.57	1.0E-83	4504320.1	Home sapiens hydroxyl-Coenzyme A dehydrogenase/3-hydroxy-3-hydroxy-Coenzyme A lyase (thioesterase protein), liver subunit (hfr1-B) mRNA	
2620	12485	22378	1.6	1.0E-83	BE03390.1	EST_HUMAN	60150737SF_NH_GC_71 Human sapient cDNA clone IMAGE3908754_5
3148	13071	228712	0.84	1.0E-83	76025240.1	Home sapiens cell recognition molecule Capp2_1/UA0868 mRNA	
3793	13705	23451	3.55	1.0E-83	AF055785.1	Partial cDNA for a putative brain specific, cell-type binding protein cDNA	
4151	14051	23826	2.22	1.0E-83	Z28822.1	NT	
4788	14874	24481	1.36	1.0E-83	45024081.1	Home sapiens amyloid beta (A4) precursor protein (protease nexinII, Alzheimer disease) (APP) mRNA	
6022	15620	260517	1.76	1.0E-83	AA027814.1	EST_HUMAN	
3727	13393	23425	2.82	7.0E-84	BE001209.1	EST_HUMAN	
1273	11180	21026	4.21	6.0E-84	BE038864.1	EST_HUMAN	
1273	11180	24029	4.21	6.0E-84	BE038864.1	EST_HUMAN	
2348	12228	22125	4.76	6.0E-84	AA070574.1	EST_HUMAN	
5206	15085	28160	8.24	6.0E-84	AA042863.2	EST_HUMAN	
5388	15307	28160	1.7	6.0E-84	AA089739.1	EST_HUMAN	
6415	16272	284440	3.17	6.0E-84	BE010371.1	EST_HUMAN	
6706	16866	28774	1.9	6.0E-84	AA070199.1	EST_HUMAN	
8827	16934	16934	1.94	6.0E-84	AA089612.1	EST_HUMAN	
8907	10830	20486	1.06	5.0E-84	AA082811.1	EST_HUMAN	
2051	12908	18643	1.01	5.0E-84	AA010971.1	NT	
6830	18643	28926	2.70	5.0E-84	11245240.1	Home sapiens regulatory factor X3 (inhibition of NF- κ B class II expression) (RF-X3) mRNA	
1354	11260	21116	1.08	4.0E-84	AB031775.1	Home sapiens mRNA for KU81/314 protein, partial cds	

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Probe SEQ ID No.	Exon ORF SEQ ID No:	Expression Signal	Most Similar (Top) NH BLAST E Value	Top Hit Assessment No.	Top Hit Database Source	Top Hit Descriptor
1389 11284	21151	4.03	4.0E-94	AIB65321.1	EST_HUMAN	wa7604-X1_Science_NFL_T_GBC_91_Homo sapiens cDNA clone IMAGE:2302085 3' similar to SW_hnRDC_HUMAN_O-4847-NARDILYSN PRECURSOR ;
4859 14749	24529	1.76	4.0E-94	AIB65301.2	NT	Homo sapiens myelin light chain kinase precursor protein 2 (MLCK) mRNA, complete cds
5060 14620	24701	1.27	4.0E-94	IWA6822.1	NT	Human 24-dehydro-CoQ reductase gene, exons 3 and 4
5416 15395	23939	1.31	4.0E-94	IWA68198.1	NT	Homo sapiens protein tyrosine phosphatases, receptor type, G (PTPRG) mRNA
5416 15330	23939	1.31	4.0E-94	IWA68198.1	NT	Homo sapiens protein tyrosine phosphatases, receptor type, G (PTPRG) mRNA
5791 15997	28905	2.35	4.0E-94	AIF050850.1	NT	Homo sapiens histone deacetylase 3 (HDAC3) gene, complete cds
6507 16366	28545	12.15	4.0E-94	IWA68198.1	NT	Homo sapiens KIAA0733 gene product (KIAA0733) mRNA
8290 18109	28413	0.50	4.0E-94	AIB65305.1	NT	Homo sapiens mRNA for KIAA1150 precursor; partial cds
313 10725	20094	1.38	3.0E-94	AIF052820.1	NT	Homo sapiens Elavl Protein homolog mRNA, partial cds
1137 11061	20881	0.86	3.0E-94	47550861	NT	Homo sapiens chorionoductal sulfide proteoglycan 2 (CSPG2) mRNA
1817 11812	21680	1.15	3.0E-94	54598355	NT	Homo sapiens partial cDNA containing Zinc finger C2H2-type domains
1982 11856	21745	3.03	3.0E-94	AID068860.1	NT	Novel human mRNA containing Zinc finger C2H2-type domains
3542 13456	23251	1.18	3.0E-94	AB202986.1	NT	Homo sapiens DNA, DEG1 to ORCOTL4 gene region, section 12 (DEG1) - ORCOTL3, ORCOTL4 genes, complete cds
3689 13402	23359	4.11	3.0E-94	AIF014499.1	NT	Homo sapiens X-linked juvenile retinoic acid receptor alpha 1 mRNA, complete cds
8253 18133	21945	7.8	3.0E-94	AIB683401.1	EST_HUMAN	wa20205_x1_Science_Discrepancy colon NCF-HD Homo sapiens cDNA clone IMAGE:2320555 3' similar to ob1_05806_618 RIBOSOMAL PROTEIN S20_HUMAN;
2058 11948	21846	5.69	2.0E-94	BE0626307.1	EST_HUMAN	CMT-B70785_E06900-275-568 BT070785_Homo sapiens cDNA
2058 11948	21846	5.69	2.0E-94	BE0626307.1	EST_HUMAN	CMT-B70785_E06900-275-568 BT070785_Homo sapiens cDNA
2813 12840	22640	9.55	2.0E-94	AIF039493.1	NT	Homo sapiens myelin transcription factor 1-like (MTF-1) mRNA, complete cds
2832 12850	22659	0.93	2.0E-94	X5820211.1	NT	H.sapiens DNA for endogenous retroviral like element
4882 11568	24264	1.11	2.0E-94	BFI000518.1	EST_HUMAN	601387624F1_NHL_MGC_17_Homo sapiens cDNA clone IMAGE:4121727 5'
4882 14568	24345	1.11	2.0E-94	BFI000518.1	EST_HUMAN	601387624F1_NHL_MGC_17_Homo sapiens cDNA clone IMAGE:4121727
66905 16575	1677	1.67	2.0E-94	AID08674.1	EST_HUMAN	6m0202_x1_Lupin, sympathetic, trunk_Homo sapiens cDNA clone IMAGE:1885728 3
9208 10003	25334	1.89	2.0E-94	BFI449000.1	EST_HUMAN	TTR04UCCS_Ogl49GS_D176622.1;
9303 15003	25335	1.89	2.0E-94	BFI449000.1	EST_HUMAN	nam0202_x1_Lupin, sympathetic, trunk_Homo sapiens cDNA clone IMAGE:4090251 3' similar to TTR04UCCS_Ogl49GS_D176622.1;
3019 10271	20090	1.63	1.0E-84	AIF11448.1	NT	Homo sapiens interferon alfa-2b isoform (IFN- α) mRNA, complete cds
537 10478	20290	5.2	1.0E-84	4807082	NT	Homo sapiens lysophosphatidic acid receptor 5-monooxygenase activation protein, zeta polypeptide (WHAZ) mRNA
703 10696	21026	0.50	1.0E-84	11427381	EST_HUMAN	Homo sapiens complement component 5 (C5) mRNA
1271 11178	21026	1.92	1.0E-84	AIA684579.1	EST_HUMAN	am5611_s1_Striatiformis schizos brain cDNA clones IMAGE:1629885 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	CRF SEQ ID NC:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Acetation No.	Top Hit Database Source	Top Hit Descriptor
2008	11800	21960	3.13	1.0E-84	BE362197.1	EST_HUMAN	60130808E/NHLH1/MOC-4/Homo sapiens cDNA clone IMAGE:3820257 6'
2176	12063	21964	1.08	1.0E-84	11427197	NT	Homo sapiens peroxisomal material 1 (PCMV1), mRNA mRNA 2e05_51 NCL720851 Homo sapiens DNA clone IMAGE:1239106 3'
3651	13005	23391	2.14	1.0E-84	EST_HUMAN	NT	Homo sapiens 65S ribosomal RNA, 16S rRNA and CRB1 on chromosome 21; segment 1/22; segment 1/3
4319	14216	23969	5.59	1.0E-84	AJ220411	NT	Homo sapiens 65S ribosomal RNA, 16S rRNA and CRB1 on chromosome 21; segment 1/22; segment 1/3
4601	14489	24275	3.82	1.0E-84	AU045314.2	EST_HUMAN	[NCF2]p45[NCF2]p23.1-434 (synonym: hlaes2); Homo sapiens cDNA clone DK/F-p34[NCF2]p45[NCF2]p23.5
4823	14216	23968	4.29	1.0E-84	AU043314.2	EST_HUMAN	[NCF2]p45[NCF2]p23.1-434 (synonym: hlaes2); Homo sapiens cDNA clone DK/F-p34[NCF2]p45[NCF2]p23.5
5797	15065	26779	1.52	1.0E-84	SL23204.1	NT	Meme water channel-26 like synaptocyte integral membrane protein homolog [lumen, uterus, mRNA, ref]
6113	16007	26143	1.49	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
6113	16007	26144	1.49	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
6220	16085	26236	1.96	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
6414	16276	26459	3.12	1.0E-84	B95C994	NT	Homo sapiens polymerase (DNA-directed) alpha (POLA), mRNA
6463	16224	26460	1.4	1.0E-84	11450869	NT	Homo sapiens NCF1A binding protein 1 (NCF1B), mRNA
7485	17265	24765	2.45	1.0E-84	503f984	NT	Fatty acid binding protein 1 (FABP1) (PP15) mRNA
7659	15091	24884	1.85	1.0E-84	4607848	NT	Homo sapiens ubiquitin specific protease 13 (leucopainidase T-3) (USP13) mRNA
7659	15091	24865	1.85	1.0E-84	4607849	NT	Homo sapiens ubiquitin specific protease 13 (leucopainidase T-3) (USP13) mRNA
8190	16925	28530	2.98	1.0E-84	11412612	NT	Homo sapiens purinergic receptor P2X(6)-1, cation receptor [P2X(6)-1], mRNA
9298	16568	28530	9.8	1.0E-84	11418165	NT	Homo sapiens chromosome 21 segment IS21C009
10571	10875	20816	1.17	5.0E-85	AL1652096.2	NT	Homo sapiens nuclear protein 58k, mRNA, complete cds
10571	10874	20817	2.3	5.0E-85	U51492.1	NT	Homo sapiens nuclear protein 58k, mRNA, complete cds
1560	11465	21652	2.9	5.0E-85	U51492.1	NT	Homo sapiens nuclear protein 58k, mRNA, complete cds
1560	11465	21323	1.07	5.0E-85	MS3282.1	NT	Human plasmalogens genes, exon 7
1651	11954	21417	4.93	5.0E-85	7657020	NT	Human plasmalogens genes, exon 7
4158	14059	23982	0.94	5.0E-85	AL165280.2	NT	Homo sapiens DK/F-p34[P21] protein (DK/F-p34[P21]), mRNA
4778	14652	24449	1.14	9.0E-85	59026970	NT	Homo sapiens chromosome 21 segment H-21G16B
9819	11554	21417	1.27	9.0E-85	7657020	NT	Homo sapiens DK/F-p34[P21] protein (DK/F-p34[P21]), mRNA
1120	13035	20877	3.24	7.0E-85	LO305084.1	NT	Homo sapiens ribosomal protein L27, mRNA, complete cds
8910	18718	20877	5.81	7.0E-85	A1115210.1	NT	Homo sapiens MSTR050 mRNA, complete cds
8718	18035	26819	2.56	6.0E-85	11435573	NT	Homo sapiens DEAD1 (asp-Glu-Ala-Asp(Hs)) box polypeptide 10 (RNA helicase) (DDX10), mRNA

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Probe Seq ID NC:	ORF Seq ID NC:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8718 185356	28920	2.56	6.0E-35	11438573	NT	Human sapiens DEAD/H (Asp-Glu-Ala-Asp)6 box polypeptide 10 (RNA helicase) (DDX10), mRNA
2285 12-68	22006	1.21	5.0E-35	AL162384.2	NT	Human sapiens chromosome 21 segment 11S(C10orf84)
8462 18335	26688	1.9	6.0E-35	AF224698.1	NT	Human sapiens mRNAs, beta A, [yssosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9886 15094		2.45	6.0E-35	AF211188.1	NT	Human sapiens T-type calcium channel alpha1 subunit Alpha1-L isoform (CACNA1I) mRNA, complete cds
5738 15046	25761	1.66	6.0E-35	BR077910.1	EST-HUMAN	60208473051 NIH MGC 83 Homo sapiens cDNA clone MAGI-5249087_5
5738 15046	25762	1.66	6.0E-35	BR077910.1	EST-HUMAN	60208473051 NIH MGC 83 Homo sapiens cDNA clone MAGI-5249087_5
8017 17867		1.68	4.0E-35	BS070285.1	EST-HUMAN	FC1-BT062-12/2000/01-07 BT0623 Homo sapiens cDNA clone HEG003
9237 19459		1.97	4.0E-35	Z16887.1	EST-HUMAN	HSDHEC003 Strategic cDNA library Human heart, cat#063208 Homo sapiens cDNA clone HEG003
1741 11185	210265	1.15	3.0E-35	AF068167.1	EST-HUMAN	HS65010_11 Sources of full length spliced NF1B, Homo sapiens cDNA clone IMAGE:2156415
4219 14117	23994	0.94	3.0E-35	BS257169.1	EST-HUMAN	6011870452 NIH L-NGC 7_Home sapiens cDNA clone IMAGE:2533916_8
4805 14889	24473	1.73	3.0E-35	BS257169.1	EST-HUMAN	HS65010_11 Sources of full length spliced NF1B, Homo sapiens cDNA clone IMAGE:2533916_8
4805 14889	24473	1.73	3.0E-35	BS257169.1	EST-HUMAN	HS65010_11 Sources of full length spliced NF1B, Homo sapiens cDNA clone IMAGE:2533916_8
4804 14144	24523	8.68	3.0E-35	AF046783.1	NT	Human sapiens F-box only protein 24 (FBXO24), mRNA
4893 14764	24540	0.94	3.0E-35	7985342	NT	Human sapiens dynein receptor, family 1, subfamily D, member 2 (DYN1222), mRNA
5729 15036	25759	0.94	3.0E-35	7905209	NT	Human sapiens KIAA0785 gene product (KIAA0785), mRNA
6729 15030	25740	6.94	3.0E-35	7862309	NT	Human sapiens KIAA0785 gene product (KIAA0785), mRNA
8152 16025		7.04	3.0E-35	AJ404488.1	NT	Human sapiens mRNA, for dynamin heavy chain (DNAH6 gene)
6584 16474	24883	1.61	3.0E-35	U44653.1	NT	Human sapiens DEINN RNA, complete cds
7190 17667	27296	4.06	3.0E-35	11430869	NT	Human sapiens phosphodiesterase C, epsilon (PDE-C), mRNA
61786 18610	28901	2.28	3.0E-35	5031600	NT	Human sapiens EGFR repeats and discoidin-like domains 3 (EDIL3), mRNA
9788 19230B		2.68	3.0E-35	11419177	NT	Human sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
9457 10871		20719	0.67	2.0E-35	785263	Human KIAA0929 protein Mas-2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
1024 10942	20798	1.85	2.0E-35	AF248540.1	NT	Human sapiens phosphatase 2B (SH2B1) mRNA, complete cds
1400 13035	21164	7.1	2.0E-35	5171775	NT	Human sapiens apolipoprotein C-II (APOC2) mRNA
1400 13035	21165	7.1	2.0E-35	5171775	NT	Human sapiens apolipoprotein C-II (APOC2) mRNA
2183 12070	21972	2.12	2.0E-35	U10525.1	NT	Human DNA polymerase delta gene, exon 12 and 13
2753 11222		4.24	2.0E-35	785468	NT	Human sapiens similar to rat integral membrane glycoprotein POM121 (POM121), mRNA
4229 14438	29913	5.42	2.0E-35	4505690	NT	Human sapiens plasmalogens (PLG) mRNA

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-Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	ORF SEQ ID NC:	Exon SEQ ID NC:	Expression Signal	Meet Similar BLAST E Value	Top HR Accession No.	Top Hit Database Source	Top Hit Descriptor
4822	14705	24469	1.3	2.0E-35	AL 652924 2	NT	[Homo sapiens chromosome 21 segment HS21C064 wtf108,x1 Kid12 Homo sapiens cDNA clone IMAGE:2390491 3' similar to centisine element M1S1 repetitive element]
7341	17209	27405	1.29	2.0E-35	BT 706820 1	EST_HUMAN	[BT 706820 1 NIH_3T3_Homo sapiens cDNA clone IMAGE:3648816 5']
2241	1225	22121	2.44	1.0E-35	BE 7842906 1	EST_HUMAN	[BE 7842906 1 NIH_3T3_Homo sapiens cDNA clone IMAGE:3688921 5']
2344	12224	22121	0.09	1.0E-35	SE 576832	EST_HUMAN	[SE 576832 NIH_3T3_Homo sapiens cDNA clone IMAGE:3688921 5']
2344	12224	22122	2.44	1.0E-35	BE 6287892 1	EST_HUMAN	[BE 6287892 NIH_3T3_Homo sapiens cDNA clone IMAGE:3688921 5']
7652	17483	27704	2.06	1.0E-35	BE 252574 1	EST_HUMAN	[BE 252574 NIH_3T3_Homo sapiens cDNA clone IMAGE:3330653 5']
8296	18175	28419	2.56	1.0E-35	AA 778785 1	EST_HUMAN	[AA 778785 NIH_3T3_Homo sapiens cDNA clone IMAGE:1452453 5']
8305	18242	28452	2.28	1.0E-35	BT 311552 1	EST_HUMAN	[BT 311552 NIH_3T3_Homo sapiens cDNA clone IMAGE:3128440 5']
8305	18242	28459	2.28	1.0E-35	BT 311662 1	EST_HUMAN	[BT 311662 NIH_3T3_Homo sapiens cDNA clone IMAGE:3128440 5']
9164	19052	28283	2.7	1.0E-35	11417862 2	NT	[Homo sapiens calcineurin binding protein (KIAA0350). mRNA]
9446	19052	28283	3.43	1.0E-35	11417862 2	NT	[Homo sapiens calcineurin binding protein (KIAA0350). mRNA]
1410	11145	7.99	6.0E-36	BE 27247 1	EST_HUMAN	[BE 27247 1 NIH_3T3_Homo sapiens cDNA clone IMAGE:23987690 5']	
220	10190	20051	1.3	7.0E-36	7052247 1	NT	[Homo sapiens KIAA0680 gene product (KIAA0680). mRNA]
921	10845	20051	1.33	7.0E-36	AA 880091 1	EST_HUMAN	[AA 880091 1 Scores_Peakphyred, tumor_NkxPA_Homo sapiens cDNA clone IMAGE:1436569 3']
6164	15121	24895	1.33	7.0E-36	AA 880091 1	EST_HUMAN	[AA 880091 1 Scores_Peakphyred, tumor_NkxPA_Homo sapiens cDNA clone IMAGE:1436569 3']
7078	16955	27148	0.91	7.0E-36	1142737 2	NT	[Homo sapiens T-cell leukemia virus type A binding protein 1 (TAXBP1). mRNA]
7563	17444	17445	2.91	7.0E-36	318567 1	NT	[Homo sapiens glicoxylate/benzoate/C (G/C) gene, exon 15]
7624	17475	27698	1.53	7.0E-36	6458507 1	NT	[Homo sapiens RAN binding protein (RNP-BP1). mRNA]
8329	18206	28455	2.15	7.0E-36	11263007 1	NT	[Homo sapiens critical region gene C (DCGC6). mRNA]
8329	18206	28456	2.15	7.0E-36	11417012 1	NT	[Homo sapiens similar to transcription factor CA150 (H. sapientis) (LOC05170). mRNA]
1272	17778	21027	0.33	6.0E-36	4564562 1	NT	[Homo sapiens megakaryocyte progenitor (Biparide). (OCDH). mRNA]
2024	10175	19863	1.48	4.0E-36	BE 5471713 1	EST_HUMAN	[BE 5471713 1 NIH_3T3_Homo sapiens cDNA clone IMAGE:3489830 5']
8977	15586	26588	10.18	4.0E-36	BE 286843 1	EST_HUMAN	[BE 286843 1 NIH_3T3_Homo sapiens cDNA clone IMAGE:3489830 5']
8957	10175	19803	1.9	4.0E-36	BE 5471713 1	EST_HUMAN	[BE 5471713 1 NIH_3T3_Homo sapiens cDNA clone IMAGE:3489830 5']
6325	15555	28411	6.02	3.0E-36	AV 340546 1	EST_HUMAN	[AV 340546 1 NIH_3T3_Homo sapiens cDNA clone IMAGE:3241303 5']
7868	17718	27953	3.01	3.0E-36	BE 886547 1	EST_HUMAN	[BE 886547 1 NIH_3T3_Homo sapiens cDNA clone IMAGE:3241303 5']
7868	17718	27954	3.31	3.0E-36	BE 886547 1	EST_HUMAN	[BE 886547 1 NIH_3T3_Homo sapiens cDNA clone IMAGE:3241303 5']
8734	17883	28126	9.01	3.0E-36	AB 565240 1	EST_HUMAN	[AB 565240 1 NIH_3T3_Homo sapiens cDNA clone IMAGE:22519371 5']
9133	19860	28046	2.02	3.0E-36	BE 410354 1	EST_HUMAN	[BE 410354 1 NIH_3T3_Homo sapiens cDNA clone IMAGE:36309753 5']
268	10231	20046	1.33	2.0E-36	AA 30284 1	EST_HUMAN	[AA 30284 1 NIH_3T3_Homo sapiens cDNA 5' end]
408	10354	20051	1.67	2.0E-36	AL 652930 2	NT	[Homo sapiens chromosome 21 segment HS21C064]

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Probe Seq ID No:	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal ID No:	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1173	110932	20929		2.16	2.0E-96	NE5977.1	EST_HUMAN
2144	12692	21090		2.37	2.0E-96	NT	Human endogenous retrovirus, complete genome
2222	12017	220111		1.12	2.0E-96	AB035103.1	NT
3369	13288	23087		1.43	2.0E-96	AV1906142.1	EST_HUMAN
3866	13599	23385		2.16	2.0E-96	AF158776.1	Human genes lymphoproliferative disorder acetyltransferase-delta (LPAAT-delta) mRNA, complete cds
3866	13569	23386		2.16	2.0E-96	AF158776.1	Human genes lymphoproliferative disorder acetyltransferase-delta (LPAAT-delta) mRNA, complete cds
3934	13862			2.42	2.0E-96	AV151742.1	EST_HUMAN
4678	14695	24980		2.8	2.0E-96	AF056490.1	Human genes cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
5560	15495	28571		1.53	2.0E-96	ZB16411.1	NT
5560	15495	28572		1.53	2.0E-96	NT	H. sapiens mRNA encoding phospholipase C
6987	16864	27057		2.22	2.0E-96	11437195.NT	H. sapiens mRNA encoding phospholipase C
6987	16864	27058		2.22	2.0E-96	11437195.NT	H. sapiens basic helicase (gamma), 2'-cyclic nucleotide dihydrogenase (gamma-butyrylcholine hydrolase)
7372	17241	27446		1.95	2.0E-96	11422084.NT	Human genes chromosome segregation 1 (yeast homolog)-like (CSE1L) mRNA
7398	17819	28051		2.69	2.0E-96	11545840.NT	Human genes basic helicase (gamma)-PAS protein (NP_4833) mRNA
7656	17816	28902		2.65	2.0E-96	11545846.NT	Human genes basic helicase (gamma)-PAS protein (NP_4833) mRNA
8276	18156	28397		1.83	2.0E-96	4759501.NT	Human peptides 50 kDa (RP36) (45) mRNA
9806	19187	25250		2.4	2.0E-96	11418198.NT	Human peptides thyroid autoantigen 70 (Tg antigen) (G22-P) mRNA
9772	19250			1.81	2.0E-96	AB011399.1	Human genes gene for AF-6, complete cds
9955	19420	25139		1.47	2.0E-96	11417853.NT	Human genes adenosine beta receptor kinase 2 (ADRBK2) mRNA
1570	11483	21343		3.1	1.0E-96	4926855.NT	Human genes NADH dehydrogenase (ubiquinone) Fe/S protein 1 (NDUFQ1) (NADH-coenzyme Q reductase)
3125	13050	22847		2.06	1.0E-96	5453646.NT	Human genes fission 5 (FBLIN5) mRNA
3197	13122	22927		2.42	1.0E-96	L20492.1	Human gamma-guttryn transpeptidase mRNA, complete cds
3236	13178	22977		1.32	1.0E-96	AL163209.2	Human genes chromosome 21 segment HS21C029
3236	13179	22978		1.32	1.0E-96	AL163209.2	Human genes chromosome 21 segment HS21C029
3864	13776	23508		11.48	1.0E-96	77076161.NT	Human genes hypothetical protein (LOC51318) mRNA
3864	13776	23569		11.48	1.0E-96	77076161.NT	Human genes hypothetical protein (LOC51318) mRNA
4167	14067	23842		8.76	1.0E-96	AL163300.2	Human genes chromosome 21 segment HS21C100
4652	14714	24497		1.11	1.0E-96	AF100751.1	Human genes chromosome 21 segment HS21C084
4852	15328	25378		2.15	1.0E-96	AL163264.2	Human genes chromosome 21 segment HS21C084
5297	15209			1.47	9.0E-97	AI156703.1	gb#J7008.x1 Scores: fetal heart, Nb1/NW Homo sapiens cDNA clone IMAGE:1708128 similar to SW-K1C1 MOUSE_P02355 KERATIN TYPE I CYTOSKELETON

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Table 4
Single Exon Probes Express

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	(Top) Hit	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
								Protein domain	Description
6403	16054	26424	2	9.0E-37	4757721	NT	Hom sapiens a dininhibitin and methylcrotonoleic acid domain 22 (ADAM22), mRNA		
6403	16054	2	9.0E-37	4757721	NT	Hom sapiens a dininhibitin and methylcrotonoleic acid domain 22 (ADAM22), mRNA			
2250	12134	20233	14.17	8.0E-57	6X2245.1	NT	Canis lupus familiaris mRNA for elongation factor 1 alpha		
2250	12134	22032	2.74	7.0E-57	Bf0628211.1	EST; HUMAN	Therapeutic target for CCR5 antagonist	CCAR-2 (C-C chemokine receptor type 5)	mRNA
6783	16840	26826	2.24	7.0E-57	Bf0628211.1	EST; HUMAN	Therapeutic target for CCR5 antagonist	CCAR-2 (C-C chemokine receptor type 5)	mRNA
7704	17644	21877	2.67	7.0E-57	Bf06282776.1	EST; HUMAN	Hom sapiens cDNA clone DKFZp434N0323	DKFZp434N0323	5
8264	18144	28384	3.38	7.0E-57	AL043344.2	EST; HUMAN	DKFZp434N0323.1 (synonym: hES3)	DKFZp434N0323	5
8264	18144	28386	10.88	7.0E-57	KP9002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SE1	MHC-HLA-SE1	mRNA
3482	13398	23263	0.87	6.0E-57	7067213	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SE1	MHC-HLA-SE1	mRNA
5685	15747	28563	1.73	6.0E-57	AB025004.1	NT	Hom sapiens mRNA for KIAA1081 protein, partial cds	KIAA1081	mRNA
8107	17697		3.52	6.0E-57	11452444	NT	Hom sapiens similar to SET translocation (myoblast leukemia-associated) (H-sapiens) [LOC383102], mRNA	SET	mRNA
1142	11056	20858	1.09	5.0E-57	AA52811.1	EST; HUMAN	ESTR00064 Fertilis 1/Hom sapiens cDNA 5' end	ESTR00064	mRNA
6450	16056	20858	1.63	5.0E-57	AA52811.1	EST; HUMAN	ESTR00064 Fertilis 1/Hom sapiens cDNA 5' end	ESTR00064	mRNA
950	10874	20721	1.33	4.0E-57	AL065210.2	NT	Hom sapiens chromosome 21 segment 1S21.2	AL065210.2	mRNA
1155	11098	20912	10.54	4.0E-57	AB037655.1	NT	Hom sapiens mRNA for KIAA1414 protein, partial cds	KIAA1414	mRNA
1411	11318	21170	0.86	4.0E-57	R7B133.1	EST; HUMAN	Yeast/Human placenta N6-CH ₂ -F Hom sapiens cDNA clone MGC:145575' 5' similar to contains Alu repetitive elements	MGC:145575'	mRNA
2372	12252	22142	1.07	4.0E-57	AB007825.1	NT	Hom sapiens mRNA for KIAA0456 protein, partial cds	KIAA0456	mRNA
2372	12252	22143	1.07	4.0E-57	7706299	NT	Hom sapiens CG-160 protein [LOC31622], mRNA	CG-160	mRNA
3419	13398	23140	2.19	4.0E-57	000321	SWISSPROT	Hom sapiens myeloid/lymphoid or mixed-lineage leukaemia (thrombocyte) homolog, translocated to 4		
5543	15234	28500	8.47	4.0E-57	TCAP-E055	EST; RELATED PROTEIN	TCAP-E055 Protein pre-B cell acute lymphoblastic leukaemia Ba/F3-TGSA protect-TGSA	TCAP-E055	mRNA
5686	15595	28696	4.35	4.0E-57	BE247284.1	EST; HUMAN	Human protein Wilberforce factor homolog corresponding to exons 23 through 34	Wilberforce	mRNA
8505	18372	28644	4.35	4.0E-57	MR0976.1	NT	Hom sapiens similar to heat shock T00D protein BB (monomer-2) (H-sapiens) [LOC31644]	MR0976.1	mRNA
8601	18738	28691	2.13	4.0E-57	1141729	NT	Hom sapiens similar to heat shock T00D protein BB (monomer-2) (H-sapiens) [LOC31644]	1141729	mRNA
5749	12645	22502	14.77	4.0E-57	4487172	NT	Hom sapiens high-molarity group (nonhistone chromatin-associated) protein P2PQ1L (H-sapiens) [LOC31644]	P2PQ1L	mRNA
4826	14708	23414	2.00	4.0E-57	AI116652.0	EST; HUMAN	AI116652.0 (H-sapiens) [LOC31644]	AI116652.0	mRNA
4826	14708	24492	1.17	2.0E-57	BF276331.1	EST; HUMAN	BF276331.1 (H-sapiens) [LOC31644]	BF276331.1	mRNA

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID NC:	Expression Signal	Most Similar BLAST HE Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4890	14760	24537	0.8	2.0E-97	BE75478.1	EST_HUMAN	RC3-H10586-200300-031-030 H (0586) Homo sapiens cDNA
5473	15593	25457	7.87	2.0E-97	BE734190.1	EST_HUMAN	(01589041) F1 NIH_L(MSC_21) Homo sapiens cDNA clone IMAGE:3843720 5'
5473	15593	25458	7.87	2.0E-97	BE734190.1	EST_HUMAN	(01589041) F1 NIH_L(MSC_21) Homo sapiens cDNA clone IMAGE:3843720 5'
5819	16725	627	6.27	2.0E-97	BE597103.1	EST_HUMAN	(0134343825) F1 NIH_L(MSC_53) Homo sapiens cDNA clone IMAGE:3893346 5'
6238	18122	28275	1.51	2.0E-97	BE29442.1	EST_HUMAN	(017100325) F1 NIH_L(MSC_17) Homo sapiens cDNA clone IMAGE:3531511 F
6238	18122	28430	1.51	2.0E-97	NA8128.1	EST_HUMAN	(y216077.1) Scores for tiver opthon TNFLs Homo sapiens cDNA clone IMAGE:243596 5'
6526	16858	28564	28.21	2.0E-97	NA8128.1	EST_HUMAN	(y216077.1) Scores for tiver opthon TNFLs Homo sapiens cDNA clone IMAGE:243596 5'
6982	16771	28690	3.81	2.0E-97	XY28561.1	NT	Human cyclinophilin gene for cycliphilin in EC 5.2.1.8
7034	17485	6.11	2.0E-97	BE597103.1	EST_HUMAN	(01589041) F1 NIH_L(MSC_39) Homo sapiens cDNA clone IMAGE:3410596 5'	
1165	12846	2.33	1.0E-97	7705653	NT	Homo sapiens putative diacylitol transfer protein [LOC557054], mRNA	
1413	13118	21181	0.94	1.0E-97	AV361977.1	EST_HUMAN	PNM-C-07285-141068-001-904 C10285 Homo sapiens cDNA
1413	13118	21182	0.94	1.0E-97	7705653	NT	Human mRNA for T-cell cyclophilin
3849	13563	23349	3.18	1.0E-97	YD0062.1	NT	Homo sapiens neurone III (NBVN3) mRNA
3973	13865	23374	2.47	1.0E-97	4758527	NT	Saturnia pyrioides basal body receptor-like protein TB 541 (TB 041) genes, exon 8
5037	14827	24568	1.04	1.0E-97	US0649.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GFRB10) gene, exon 8
6774	15881	25788	3.39	1.0E-97	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GFRB10) gene, exon 8
6774	15881	25789	3.39	1.0E-97	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GFRB10) gene, exon 8
6370	16238	26398	1.8	1.0E-97	11431590	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
6724	16904	25793	13.13	0.9E-97	AF214562.1	NT	Homo sapiens epithelial membrane protein envelope protein S17Gal VI, complete cds
7165	17042	27233	1.19	1.0E-97	AB022918.1	NT	Homo sapiens mRNA for alpha-2-sialyltransferase S17Gal VI, complete cds
7165	17042	27234	1.19	1.0E-97	AB022918.1	NT	Homo sapiens mRNA for alpha-2-sialyltransferase S17Gal VI, complete cds
7554	17405	27620	2.77	1.0E-97	BE818183.1	EST_HUMAN	RCB-BN0278-050700-012-002 BN0278 Homo sapiens cDNA
7554	17405	27621	2.77	1.0E-97	BE818183.1	EST_HUMAN	RCB-BN0278-050700-012-002 BN0278 Homo sapiens cDNA
8114	18003	28249	2.06	1.0E-97	5729867	NT	Homo sapiens Rb1 gene, retinoblastoma element
8397	18244	-	-	-	D10083.1	NT	Homo sapiens Rb1 gene, retinoblastoma element
9559	19751	-	-	-	7857652	NT	Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exon 12
1090	11009	20847	7.39	9.0E-98	AF167485.1	NT	Homo sapiens mRNA for KIAA389 protein, partial cds
1327	11234	21050	2	9.0E-98	AB037820.1	NT	Homo sapiens mRNA for KIAA389 protein, partial cds
1327	11234	21051	2	9.0E-98	AB037820.1	NT	Homo sapiens mRNA for KIAA389 protein, partial cds
3574	13486	23287	1.13	9.0E-98	AL162099.2	NT	(fimo)apigenin chromosomal 21 segment fts2C009
4172	14072	23847	2.64	9.0E-98	X01929.1	NT	H. sapiens ECE-1 gene (exon 9)
4172	14072	23848	2.64	9.0E-98	X01929.1	NT	H. sapiens ECE-1 gene (exon 9)
4984	14812	24590	1.23	6.0E-98	AB26898.1	NT	Homo sapiens DNA-DLE1 to ORC1L4 gene region, section 12 (DLE1, ORC1L3, ORC1L4 genes, complete cds)

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Probe SEQ ID NO.	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal Value	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
							Genomic X-linked antidiolitic exodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions	Hom sapiens X-linked antidiolitic exodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
72/6	17093	27284	3.69	6.0E-98	AF000528.1	NT		
1707	11885		1.19	5.0E-98	7685887 NT			
2032	12470	22306	3	5.0E-98	NB8096.1	EST_HUMAN	K0749 Human fetal heart, Lambda ZAP-Express Homo sapiens cDNA clone K0749 5' similar to ZINC FINGER PROTEIN 1 (ZFP1)	
2070	12807	22866	0.92	5.0E-98	AF114498.1	NT	Hom sapiens interferes in short isoform (ITSN) mRNA, complete cds	
2078	12005	22704	0.94	5.0E-98	AF114498.1	NT	Hom sapiens interferes in short isoform (ITSN) mRNA, complete cds	
2078	12005	22705	0.94	5.0E-98	AF114498.1	NT	Hom sapiens interferes in short isoform (ITSN) mRNA, complete cds	
3493	13263		2.37	5.0E-98	AB69321.7	EST_HUMAN	ubiquitin C-terminal hydrolase L1 (UBC-L1) Homo sapiens cDNA clone MAGE-233769 5' similar to contains Als repetitive element/contains element (MAGE2) MECOM repetitive element;	
3491	13407	23212	0.91	5.0E-98	AF114498.1	NT	Hom sapiens interferes in short isoform (ITSN) mRNA, complete cds	
4651	14519	24310	0.87	5.0E-98	AF114498.1	NT	Hom sapiens interferes in short isoform (ITSN) mRNA, complete cds	
6039	16042	26185	2.64	5.0E-98	H10032.1	EST_HUMAN	YMD010.1 Germline Infant Brain (NIB) Homo sapiens cDNA clone MAGE-247126 5'	
6657	16507	26694	1.84	5.0E-98	AF114498.2	NT	Hom sapiens chromosome 21 segment H321004	
1307	11214	21070	1.54	5.0E-98	EF597226.1	EST_HUMAN	PMT-TH0022-05000000-00-10 Transfected Homo sapiens cDNA	
1307	11214	21070	1.84	5.0E-98	EF597226.1	EST_HUMAN	PMT-TH0022-05000000-00-10 Transfected Homo sapiens cDNA	
6205	18150	26316	1.03	4.0E-98	11162665 NT	EST_HUMAN	PMV12.1 transforming growth factor beta-binding protein 1 (TGFBB1) mRNA	
8226	18160	28442	2.84	4.0E-98	482094 NT		Hom sapiens transforming growth factor beta-binding protein 1 (TGFBB1) mRNA	
8700	18595	28833	2.1	4.0E-98	786194 NT		Hom sapiens KIAA0152 gene product (KIAA0152) mRNA	
8700	18595	28594	2.1	4.0E-98	786194 NT		Hom sapiens KIAA0152 gene product (KIAA0152) mRNA	
715	10547	20475	0.98	3.0E-98	11545800 NT		Hom sapiens topoisomerase protein FL1 (21684 (FL1)21684) mRNA	
1770	11669		4.77	3.0E-98	4858020 NT		Hom sapiens zinc finger protein 25g (ZNF25g) mRNA	
2018	12845	22647	4.51	3.0E-98	NE05651.1	EST_HUMAN	za4812.1 Sarcos fetal liver spleen 1HFS Homo sapiens cDNA clone IMAGE-2856823 3'	
4147	14047	25819	1.21	3.0E-98	4801912 NT		Hom sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA	
4147	14047	23520	1.21	3.0E-98	4801912 NT		Hom sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA	
4390	142770		3.17	3.0E-98	11293000 NT		Hom sapiens hypothetical protein FL1 (20220 (FL1)20220) mRNA	
8242	15160	24897	4.09	3.0E-98	11426507 NT		Hom sapiens voltage-gated potassium channel protein (VGPC) mRNA	
5459	15349	25403	3.84	3.0E-98	9665888 NT		Hom sapiens polycomb family nuclear 1 (PCPN1) mRNA	
5459	15349	25480	3.39	3.0E-98	11420697 NT		Hom sapiens viral sarmant leukemia viral oncogene homolog A (ras related) (VRAA) mRNA	
6224	16064	26508	12.03	3.0E-98	AF272085.1	NT	Hom sapiens putative orphan transporter 1 mRNA, complete cds	
6442	15313	25478	6.66	3.0E-98	11354500 NT		Hom sapiens plakophilins-related arm domain-binding protein 1 (PRBP2) mRNA	
6620	16500	26588	8.52	3.0E-98	11421726 NT		Hom sapiens growth differentiation factor 5 (GDF5) mRNA	

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
<i>Hom sapiens methyladenine nucleotidase/biosynthesis protein A and methyladenine nucleotidase/biosynthesis protein D mRNA, complete cds</i>							
6709	16848	28816	1.41	3.0E-98	EF034374.1	NT	<i>Hom sapiens L-adenylate-ribosidetriphosphate virus E26 oncogene related (ERG), mRNA</i>
7427	16440	26526	2.12	3.0E-98	11526292	NT	<i>Hom sapiens transducin-1; intracellular protein (TCN2), mRNA</i>
9286	18988	18988	4.78	3.0E-98	11417974	NT	<i>Hom sapiens presenilin-binding protein, EF hand transcription factor (CSENI), mRNA</i>
1020	10398	20750	1.42	2.0E-98	7303168	NT	<i>Hom sapiens SNARE protein kinase SNAK, mRNA, complete cds</i>
1607	11512	21312	0.93	2.0E-98	AJ246219.1	NT	<i>Hom sapiens SNARE protein kinase SNAK, mRNA, complete cds</i>
1716	11617	21486	4.19	2.0E-98	AF246219.1	NT	<i>Hom sapiens SNARE protein kinase SNAK, mRNA, complete cds</i>
4526	14226	24007	1.93	2.0E-98	6031669	NT	<i>Hom sapiens dynl, neuronal, light chain peptide 4 (DNAL1), mRNA</i>
5904	16518	25697	4.98	1.0E-98	U17818-sea-20-042017	EST_HUMAN	<i>U17818-sea-20-042017 (NC_034951) cDNA clone IMAGE:2718150_3 similar to WP_50272.2</i>
5904	15918	25508	4.98	1.0E-98	AV139685.1	EST_HUMAN	<i>U17818-sea-05-042017 (NC_034951) cDNA clone IMAGE:2718760_3 similar to WP_50272.2</i>
6004	15909	26033	17.59	1.0E-98	AJ8007877.1	NT	<i>Hom sapiens KIAA0417, mRNA, complete cds</i>
6004	15909	26034	17.59	1.0E-98	AJ8007877.1	NT	<i>Hom sapiens KIAA0417, mRNA, complete cds</i>
6263	16128	28282	4.06	1.0E-98	AA485981.1	EST_HUMAN	<i>aa8411.st1.NCI COAP GC3 Home sapiens cDNA clone IMAGE:1617676_3 similar to gb M16842</i>
7524	17275	27584	2.96	1.0E-98	AL043314.2	EST_HUMAN	<i>CE008651: DKZ26434010323 [J]_134 (synonym: hs35) Home sapiens cDNA clone IMAGE:1617676_3 similar to gb M16842</i>
8742	17961	26135	2.27	1.0E-98	AA091479.1	EST_HUMAN	<i>U17961-sea-05-042017 (NC_034951) cDNA clone IMAGE:2718150_3 similar to WP_50272.2</i>
9502	19117	29447	2.98	1.0E-98	AL162946.2	NT	<i>Hom sapiens chromoncone 21, segment HS21/CDM6</i>
8321	18198	12658	4.12	8.0E-98	11421288	NT	<i>Hom sapiens transgelin 2 (TAGLN), mRNA</i>
2705	12659	22459	1.41	8.0E-98	BE311597.1	EST_HUMAN	<i>00114246f1_NH1 MGC_11 Home sapiens cDNA clone IMAGE:5506186_5</i>
426	10371	20194	1.35	7.0E-98	765723	NT	<i>Hom sapiens homotypically upregulated by tumor-associated kinase (HANK), mRNA</i>
426	10371	20195	1.35	7.0E-98	765723	NT	<i>Hom sapiens homotypically upregulated by tumor-associated kinase (HANK), mRNA</i>
4785	14870	24467	2.94	7.0E-98	4557940	NT	<i>Hom sapiens centrin element component B, beta polypeptide (CEB), mRNA</i>
4847	14728	24511	6.14	7.0E-98	AL045748.1	EST_HUMAN	<i>JK17-p44-246_7_f_434 (synonym: hs35) Home sapiens cDNA clone DKZ2643424-246_7</i>
6334	15254	25076	1.35	7.0E-98	X988522.1	NT	<i>H_sapiens CL3 gene, complete CDS</i>
6334	15254	24977	1.35	7.0E-98	X988522.1	NT	<i>H_sapiens CL3 gene, complete CDS</i>
6426	16269	25450	1.78	7.0E-98	11420754	NT	<i>Hom sapiens scaf related protein 23 complex subunit 1A (41 kD) (ASPC-A), mRNA</i>
8006	17856	28097	1.42	7.0E-98	X62048.1	NT	<i>H_sapiens West Hu gene</i>
8006	17856	28098	1.42	7.0E-98	X62048.1	NT	<i>H_sapiens West Hu gene</i>
8012	17862	28107	1.17	7.0E-98	AB020690.1	NT	<i>Hom sapiens mRNA for KIAA0823 protein, partial cds</i>
8012	17862	28108	1.17	7.0E-98	AB020690.1	NT	<i>Hom sapiens mRNA for KIAA0823 protein, partial cds</i>
9920	19393	19727	3.07	7.0E-98	U9727.1	NT	<i>Human nucleotide hydrolase (ACO2) gene, exon 2</i>
1006	10824	20768	1.07	6.0E-98	5803134	NT	<i>Hom sapiens inner membrane protein, mitochondrial (mifdin) (NM111), mRNA</i>
2169	12053	21954	1.12	6.0E-98	4566124	NT	<i>Hom sapiens serine/threonine-protein kinase Frp4, homolog (PRF4), mRNA</i>

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Enriched Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal Value	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2853	12283	22154	1.97	6.0E-89	4507788 NT	Hom sapiens ubiquitin-conjugating enzyme E2L_3 (UBE2L_3) mRNA	
2853	12283	22155	1.97	6.0E-89	4507788 NT	Hom sapiens ubiquitin-conjugating enzyme E2L_3 (UBE2L_3) mRNA	
3480	13396	23201	0.64	6.0E-89	7057677 NT	Hom sapiens HSPPC159 protein (HSPPC159) mRNA	
4537	14430	24211	3.5	6.0E-89	AB007886.2 NT	Hom sapiens mRNA for KIAA0405 protein, partial cds	
4537	14430	24212	3.5	6.0E-89	AB007886.2 NT	Hom sapiens mRNA for KIAA0405 protein, partial cds	
5007	14831	24646	2.77	5.0E-89	B2E244323.1 EST_HUMAN	cDNA clone TOBAPmP383	T-Cell acute lymphocytic leukemia Baylor-HGSC probe=TOBA_Homo sapiens cDNA clone TOBAPmP383
5007	14831	24647	2.77	5.0E-89	B2E244323.1 EST_HUMAN	cDNA clone TOBAPmP383	T-Cell acute lymphocytic leukemia Baylor-HGSC probe=TOBA_Homo sapiens cDNA clone TOBAPmP383
6477	16336	26563	1.33	4.0E-89	B2E2746.1 EST_HUMAN	GIVAN-T0022-080600-215-g03 N10022_Homo sapiens cDNA	
2847	12735	22563	1.61	3.0E-89	AV976184.1 EST_HUMAN	MG/MN_Homo sapiens cDNA	
9953	19241	26215	1.92	3.0E-89	AV705749.1 EST_HUMAN	EST-38290_MAGE_5 repetitive element; ADBBGAG01 5'	
121	10346	20176	1.46	2.0E-89	7709870 NT	Hom sapiens PR2b protein (PR2b) mRNA	
121	10346	20176	1.46	2.0E-89	7709870 NT	Hom sapiens PR2b protein (PR2b) mRNA	
402	10348	20176	0.91	2.0E-89	7709870 NT	Hom sapiens PR2b protein (PR2b) mRNA	
402	10348	20176	0.91	2.0E-89	7709870 NT	Hom sapiens PR2b protein (PR2b) mRNA	
519	10461	20272	0.83	2.0E-89	AB037703.1 NT	Hom sapiens mRNA for KIAA1342 protein, partial cds	
2862	12780	22569	2.01	2.0E-89	A2220065.1 EST_HUMAN	obj460_x1 Soares, NFL_T, GBC_S1 Homo sapiens cDNA clone library (HUMAN), contains Alu repetitive element;	
4053	13655	29751	1.45	2.0E-89	AF089807.1 NT	GAMMA GLUTAMYL TRANSPEPTIDASE-1 PRECURSOR (HUMAN), partial cds	
4051	13653	29740	6.18	2.0E-89	AF05742.1 NT	Hom sapiens Hsc70 gene for hsc70 heat shock protein (HSP70), exons 10-11	
4061	13663	29741	6.18	2.0E-89	AF05742.1 NT	Hsc70 gene for hsc70 heat shock protein (HSP70), exons 10-11	
4396	14392	24076	1.14	2.0E-89	AB007378.1 NT	Hom sapiens GGT gamma for glycine kinase (GK), exon 5	
5368	15288	26123	2.5	2.0E-89	AB007548.1 NT	Hom sapiens gene for LEC72, complete cds	
5538	15455	26525	1.6	2.0E-89	U03685.1 NT	Human N-ethylmaleimide-sensitive factor mRNA, partial cds	
6520	16579	26557	4.93	2.0E-89	U03681.1 NT	Human GT24 (GT24) mRNA, partial cds	
6530	16510	26559	3.73	2.0E-89	U128061 NT	Hom sapiens solute carrier family 24 (copper/potassium/malate exchanger), member 2 (SLC24A2), mRNA	
8850	18668	28951	2.63	2.0E-89	U1163441 NT	Hom sapiens integrin, alpha 3 (antigen CD49c, alpha 3 subunit of VLA-3 receptor) (ITGA3), mRNA	
8854	18666	28953	4.87	2.0E-89	U1143567 NT	Hom sapiens cell adhesion molecule with homology to L1CAM (close homologue of L1) (CHL1), mRNA	
8955	16752	29055	2.24	2.0E-89	U106822.1 NT	Human MAGE-7 antigen (MAGE7) pseudogene, complete cds	

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Probe SEQ ID NO:	ORF SEQ ID NO:	Exon SEQ ID NO:	Expression Signal ID No:	Most Similar (Top) HR BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8800	18672	28690	6.12	1.0E-569	BF186052.1	EST_HUMAN	hsf100.x1 NCBI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134807 3' similar to TR_054778 054778
8880	18672	28691	6.12	1.0E-569	BF186052.1	EST_HUMAN	hsf100.x1 NCBI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134807 3' similar to TR_054778 054778
6789	18698	28659	1.16	9.0E-50	AL163246.2	NT	SOLUTE CARRIER FAMILY 22-LIKE 2 PROTEIN ; SOLUTE CARRIER FAMILY Y 22-LIKE 2 PROTEIN ;
6789	18698	28660	1.16	9.0E-50	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21_C046
1047	10965	28606	1.62	8.0E-50	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21_C046
1048	10965	28608	2.93	8.0E-50	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21_C046
1318	12690	21072	5.38	8.0E-50	BF186051.1	EST_HUMAN	7e6fb6_x1 NCBI_CGAP_L124 Homo sapiens cDNA clone IMAGE:32844983 3'
1308	12690	21073	6.38	8.0E-50	BF186051.1	EST_HUMAN	7e6fb6_x1 NCBI_CGAP_L124 Homo sapiens cDNA clone IMAGE:32844983 3'
818	10749		2.65	7.0E-50	AF223591.1	NT	Homo sapiens calcium channel alpha1 subunit (CACNA1E) gene, exons 7-46, and partial cds, alternatively spliced
6607	16785		1.91	7.0E-50	AF223577.1	EST_HUMAN	8d16568578_x1 Scores 1375603 3'
7183	17060	27590	1.48	7.0E-50	BF1862025.2	EST_HUMAN	8d16568578_x1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:38556524 3'
7183	17060	27591	1.88	7.0E-50	BF1862025.2	EST_HUMAN	8d16568578_x1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:38556524 3'
7833	17683	27627	1.98	7.0E-50	HB8846.1	EST_HUMAN	8f8504_x1 Scores 1712080 3' similar to SP_C1TC_HUMAN_P11586 C-1-TETRAHYDROFOLATE SYNTHASE, CYTOPLASMIC ;
7833	17683	27628	1.98	7.0E-50	HB8846.1	EST_HUMAN	8f8504_x1 Scores 1712080 3' similar to SP_C1TC_HUMAN_P11586 C-1-TETRAHYDROFOLATE SYNTHASE, CYTOPLASMIC ;
3029	12957	227150	1.14	6.0E-50	X01925.1	NT	Uaptiens ECE-1 gene (exon 6)
4134	14034	23809	7.33	6.0E-50	8922398_N	NT	Homo sapiens hypothetical protein FLJ10388s (FLJ10388), mRNA
4134	14034	23810	7.33	6.0E-50	8922398_N	NT	Homo sapiens hypothetical protein FLJ10388s (FLJ10388), mRNA
5691	15654	26546	3.54	8.0E-50	U77700.1	NT	Homo sapiens HsGDN1 mRNA, partial cds
5691	15654	26547	3.54	8.0E-50	U77700.1	NT	Homo sapiens HsGDN1 mRNA, partial cds
6846	18725	26816	3.25	8.0E-50	4504794_N	NT	Homo sapiens hscdh1.4-5'-triphosphate reductase, type 3 (TRP3) mRNA
6846	18725	26816	3.25	8.0E-50	4504794_N	NT	Homo sapiens hscdh1.4-5'-triphosphate reductase, type 3 (TRP3) mRNA
149	10123		10.5	5.0E-50	AB052554.1	NT	Homo sapiens TGL gene, exon 1-10b
1175	11097	20034	1.55	5.0E-50	UB0225.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
2308	12392	22273	2.19	5.0E-50	AH14471.1	NT	Homo sapiens interleukin long isoform (IL11) mRNA, complete cds
4440	14334	24124	3.08	5.0E-50	4506354_N	NT	Tablet organisms:encyclopedia of genes (PO) mRNA
4507	14400	24186	1.07	5.0E-50	AJ705222.1	EST_HUMAN	2f0251_x1 Scores 1712042 3'
4507	14400	24187	1.07	5.0E-50	AJ705222.1	EST_HUMAN	2d82a70_x1 Scores 1712042 3'
4571	14463	24255	0.98	5.0E-50	AL135649.1	EST_HUMAN	DK7z7p7z2p7161_x1 Scores 1712042 3'

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Probe SEQ ID NO:	Exon SEQ ID NC:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6433	15553	25406	2.52	5.0E-50	Z16411.1	NT	H_sapiens mRNA encoding phosphoproteinase c
6523	15553	25409	2.13	5.0E-50	Z16411.1	NT	H_sapiens mRNA encoding phosphoproteinase c
6263	16147	28502	2.28	5.0E-50	A113708.1	NT	Homo sapiens angiopoietin 1 (ANG1) mRNA, partial cds
6263	16147	28503	2.25	5.0E-50	A113708.1	NT	Homo sapiens angiopoietin 1 (ANG1) mRNA, partial cds
5464	16223	29459	7.93	5.0E-50	4057259	NT	Homo sapiens adenylyl cyclase 8 (ACCV9) mRNA
6825	16704	28899	4.66	5.0E-50	11344833	NT	Homo sapiens hypothetical protein FLJ13222 (FLJ13222) mRNA
7551	17432	27646	1.24	5.0E-50	11419429	NT	Homo sapiens similar to ectonucleotide pyrophosphatases/phosphodiesterase 3 (H_sapiens) (LOC08214), mRNA
7988	17518	28060	15.41	5.0E-50	11453721	NT	Homo sapiens ATP-BPs, amphiphospholipid transport-like Class 3 type 8A, member 2 (ATPBAC2), mRNA
9744	19206	216	2.16	5.0E-50	A011359.1	NT	Homo sapiens gene for AT-5, complete cds
9789	19289	20083	2.37	5.0E-50	A1253956.1	EST_HUMAN	at7805.1x1 Barsheva et al. HPLR86 Home sapiens cDNA clone IMAGE:21287613
290	10265	20083	1.85	4.0E-50	A1231620.1	NT	Homo sapiens chromosome 21 unknown cRNA
298	10265	20084	1.85	4.0E-50	A1231620.1	NT	Homo sapiens chromosome 21 unknown cRNA
1070	16665	20829	2.94	4.0E-50	4505315	NT	Homo sapiens myoinositol phosphatases, target subunit 1 (MPT1), mRNA
1663	21432	45053	9.22	4.0E-50	X06033.1	NT	Hsapine gene encoding discoidin receptor tyrosine kinase, exon 18
4557	14460	24325	4.07	4.0E-50	D87675.1	NT	Homo sapiens gene for amyloid precursor protein, complete cds
4691	14577	24572	1.97	4.0E-50	A033070.1	NT	Homo sapiens mRNA for KIAA2344 protein, partial cds
4713	14568	24555	1.9	4.0E-50	M59571	NT	Human Performance-controlling enzyme (NEC2) gene, entire B
8601	18709	29004	103.52	3.0E-50	B05383.3	EST_HUMAN	60153324491 NIH:RCC_39 Homo sapiens cDNA clone (MAGE:338647)
207	10178	19985	4.28	2.0E-50	B657913.1	EST_HUMAN	(60106737871 NIH:JGM1) 10 Homo sapiens cDNA clone (MAGE:3459884)
1156	11069	20913	3.65	2.0E-50	5031748	NT	Homo sapiens high-mobility group (nondiamond chromosome) protein 17 (HMGB1), mRNA
1156	11069	20914	3.65	2.0E-50	5031748	NT	Homo sapiens high-mobility group (nondiamond chromosome) protein 17 (HMGB1), mRNA
3771	13083	23405	2.81	2.0E-50	A138213.1	EST_HUMAN	similar to SW_OL73_MOUSE_F23275 OLfactory receptor OR3 ;
4588	14476	24284	1.13	2.0E-50	A0506627.1	NT	Homo sapiens mRNA for KIAA0256 gene, partial cds
4820	14703	24488	8.53	2.0E-50	57293855	NT	Homo sapiens GRB2-related adapter protein (GRAF) mRNA
6554	15451	24550	4.34	2.0E-50	A1672956.1	EST_HUMAN	baf6d05.6 NIH:MGC_10 Homo sapiens cDNA clone (MAGE:2950881) 5' similar to TR_075298_075208
7658	17489	27708	2.9	2.0E-50	11427320	NT	Homo sapiens similar to laminin receptor 1 (67kD, ribosomal protein SA) (H_sapiens) (LOC03484), mRNA
7658	17489	27709	2.9	2.0E-50	11427320	NT	Homo sapiens similar to laminin receptor 1 (67kD, ribosomal protein SA) (H_sapiens) (LOC03484), mRNA
7722	17872	27795	1.56	2.0E-50	A116985.1	EST_HUMAN	AUT18865 HEMIBA_Homo sapiens cDNA clone (HEMBA10047765)

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal Value	Most Similar BLAST E Value	(Top) HH Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
7722 17672	27767	1.56	2.0E-50	AU116865.1	EST_HUMAN	AUT16865 HEMATopo sapiens cDNA clone done [EMBA 004765 5'		
8765 17914	28156	49.27	1.0E-50	11024711 NT	Hom sapiens myoactin, heavy polypeptide 4, skeletal muscle (NM_014).	mRNA		
275 10241	20080	3.39	1.0E-50	4526165 NT	Hom sapiens amyloid beta (A ₁) precursor protein (protease nexin 1, Alzheimer disease) (APP). mRNA			
370 12639	20148	1.21	1.0E-50	AJ231620.1	Hom sapiens chromodomain 21, unknown (NRNA)			
650 10613	20435	1.04	1.0E-50	AJ231598.1	Hom sapiens SMC3, SNCA isoform 21, unknown (NRNA)			
680 10613	20435	2.03	1.0E-50	AJ231598.1	Hom sapiens SNCA for T-box transcription factor (TBX20) gene, partial			
680 10613	20435	2.03	1.0E-50	AJ231598.1	Hom sapiens SNCA for T-box transcription factor (TBX20) gene, partial			
713 10645	20472	7.71	1.0E-50	AJ231598.1	Hom sapiens ALR-like protein mRNA, partial cds			
713 10645	20473	7.71	1.0E-50	AJ231598.1	Hom sapiens ALR-like protein mRNA, partial cds			
1084 11010	2.45	1.0E-50	4507828 NT	Hom sapiens Kruppel-like factor 7 (ubiquilin) (KLF7). mRNA				
1284 11162	21044	3.47	1.0E-50	A0908154.1	Hom sapiens protein phosphatase 2A, B5 gamma subunit gene, exon 3			
1284 11162	21045	3.47	1.0E-50	A0908154.1	Hom sapiens protein phosphatase 2A, B5 gamma subunit gene, exon 3			
1644 11546	4.02	1.0E-50	BE3716894.1	EST_HUMAN	Hom sapiens similar to SALL1 (satellite of B-cell) (LOC511187). mRNA			
1860 11760	21681	4.98	1.0E-50	11420514 NT	Hom sapiens similar to SALL1 (satellite of B-cell) (LOC511187). mRNA			
2823 12752	22545	8.4	1.0E-50	6003720 NT	Hom sapiens chromosome 8 open reading frame 2 (C8orf2). mRNA			
3777 13869	23473	1.18	1.0E-50	A02027010.1	Hom sapiens mRNA for KIAA0063 protein; partial cds			
3777 13869	23474	1.18	1.0E-50	A02027010.1	Hom sapiens mRNA for KIAA0063 protein; partial cds			
4320 14223	24005	1	1.0E-50	AF167340.1	Hom sapiens soluble interleukin-6 receptor accessory protein (IL6RA/P) gene, exon 8, alternative exons 9			
5481 15401	25464	2.2	1.0E-50	A0204533.1	Hom sapiens mRNA for KIAA0533 protein; partial cds			
6521 16580	26558	2.85	1.0E-50	11420759 NT	Hom sapiens solute carrier family 1 (high affinity reuptake glutamate transporter), member 6 (SLC1A6). mRNA			
7121 16958	27165	3.78	1.0E-50	11422065 NT	Hom sapiens Lysine/Histidine glutamine nucleotide-exchanging protein 2 (B3GnT). mRNA			
7346 17224	1.22	1.0E-50	AJ163884.1	Hom sapiens SNCA isoform 1 (SNCA isoform 1). mRNA				
7371 17240	217441	1.72	1.0E-50	11422109 NT	Hom sapiens CG176 protein (LOC51098). mRNA			
7371 17240	217445	1.72	1.0E-50	11422109 NT	Hom sapiens CG176 protein (LOC51098). mRNA			
6732 16268	26225	1.86	1.0E-50	A0202056.1	Hom sapiens DNA for Human PDXM, complete cds			
9732 19208	25226	1.86	1.0E-50	A0202056.1	Hom sapiens Unrelated A-H histidyl glutamine nucleotide-exchanging protein 2 (B3GnT). mRNA			
4101 14001	22780	5.48	8.0E-51	D12234.1	EST_HUMAN	HUM000581 Liver HepG2 cell line. Hom sapiens cDNA clone s681.3'		
1428 11333	21168	0.88	7.0E-51	A020224.1	Hom sapiens no specific contact-binding protein CBP86. mRNA, partial cds			
6825 16714	269037	2.05	7.0E-51	11419234 NT	Hom sapiens malic acid, ring finger protein 1 (MKRN1). mRNA			
3429 13446	23151	1.47	8.0E-51	A0202764.1	EST_HUMAN	260004-1 Scores: 1.01, live_spider, 1NES_S1_Heme sensor, cDNA clone IMAGE-448015'3'		
4415 14309	24092	1.05	8.0E-51	AU143559.1	EST_HUMAN	AU143559.1 Scores: 0.06, 1002087.5'		

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal Value	Most Similar (Top) BLAST E Value	Top Hit Assession No.	Top Hit Database Source	Top Hit Descriptor
4475	1309	24093	1.05	6.0E-91	AU143539	Homo sapiens cDNA clone Y760A1 (00102087) 6	EST_HUMAN
4703	14589	24579	0.32	5.0E-91	7110634	NT	Human sapiens chromosome 22 open reading frame e (C22ORF5), mRNA
4703	14589	24890	0.82	5.0E-91	7110634	NT	Human sapiens chromosome 22 open reading frame e (C22ORF5), mRNA
7087	19524	27151	1.34	5.0E-91	AV569875	EST_HUMAN	AV569875 GLC Homo sapiens cDNA clone GL_C57Yf06_3
7087	19614	27158	1.34	5.0E-91	AV569875	EST_HUMAN	AV569875 GLC Homo sapiens cDNA clone GL_C57Yf06_3
3106	13091	22986	1.3	4.0E-91	AF136767	NT	Human sapiens lysophosphatidic acid acyltransferase-chain (LPAAT1-delta) mRNA, complete cds
3106	13091	22988	1.3	4.0E-91	AF136767	NT	Human sapiens lysophosphatidic acid acyltransferase-chain (LPAAT1-delta) mRNA, complete cds
8301	16160	28427	3.13	4.0E-91	AL163284	NT	Human sapiens chromosome 21 segment 11S21C084
9239	18984	28514	1.87	4.0E-91	M77994	EST_HUMAN	EST (5') hippocampus, Strategic (alt. #8528205) Homo sapiens cDNA clone HHCNC50 similar to EST01579 Hippocampus, Strategic (alt. #8528205) Homo sapiens cDNA clone HHCNC50 similar to Retinoblastoma-related gag polyprotein
9239	18984	23586	1.57	4.0E-91	M77994	EST_HUMAN	EST01579 Hippocampus, Strategic (alt. #8528205) Homo sapiens cDNA clone HHCNC50 similar to Retinoblastoma-related gag polyprotein
1601	11506	21396	5.12	3.0E-91	11495168	NT	Human sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
1601	11506	21397	5.12	3.0E-91	11495169	NT	Human sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
2824	12462	22382	0.99	3.0E-91	AF089551	NT	Human sapiens beta-ureidopropionase (BUP) gene, exon 6
2824	12462	22383	0.98	3.0E-91	AF089551	NT	Human sapiens chromosome 21 segment 11S21C083
3297	13219	23020	1.77	3.0E-91	AL163283	NT	Human sapiens mRNA for KIAA1278 protein, partial cds
3419	15333	23136	2.96	3.0E-91	AB033510	NT	Human sapiens mRNA for KIAA1278 protein, partial cds
3419	15333	23137	2.96	3.0E-91	AB033510	NT	Human sapiens mRNA for KIAA1278 protein, partial cds
3720	18622	23418	0.83	3.0E-91	AF064530	NT	Human sapiens cyclin-D1-binding Mo-like protein mRNA, complete cds
4487	14381	24168	4.02	3.0E-91	MB09384	NT	Human Ku (p70p80) subunit mRNA, complete cds
4905	14785	24550	1.2	3.0E-91	AL163285	NT	Human sapiens chromosome 21 segment 11S21C085
4905	14785	24581	1.2	3.0E-91	AL163285	NT	Human sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA
5488	15407	25770	1.45	3.0E-91	11495164	NT	Human sapiens epsilon/delta/delta-7/prim-7 (E/D-7) (HE), mRNA
5807	15712	25897	2.39	3.0E-91	4502740	NT	Human sapiens cyclin-D1-dependent kinase 6 (CDK5), mRNA
5807	15872	25898	4.11	3.0E-91	11497611	NT	Human sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA
5827	15922	25997	4.11	3.0E-91	11497611	NT	Human sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA
6502	16391	26535	4.4	3.0E-91	UB9595	NT	Human L-type calcium channel beta-1 subunit (CACNL1B), gene, exons 10 and 11
6502	16391	26536	4.4	3.0E-91	UB9595	NT	Human L-type calcium channel beta-1 subunit (CACNL1B), gene, exons 10 and 11
7039	15970	27163	3.31	3.0E-91	D16494	NT	Human mRNA for very low density lipoprotein receptor, complete cds
9480	19104	25986	1.45	3.0E-91	AF240786	NT	Human glutathione S-transferase theta 1 (GSTT1)

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9812	12492	22382	3.03	3.0E-91 AF199555.1	NT	Human sapiens beta-ketothiolase/propanoate (BLU-1) gene, exon 6	
9912	12492	22382	3.03	3.0E-91 AE096255.1	NT	Human sapiens beta-ketothiolase/propanoate (BLU-1) gene, exon 6	
42	10030	19833	3.02	1.0E-91 AF105384.2	NT	Human sapiens chromosome 21 segment 1S21 CD94	
6050	11133	209877	3.86	1.0E-91 AF497486.1	EST_HUMAN	U10423-04-01-04-151 NCBI_Seq5 Homo sapiens cDNA clone IMAGE:2755860 3	
6050	19035	261705	1.7	1.0E-91 BFM348182.1	EST_HUMAN	60202026887 NCBI_Brain6 Homo sapiens cDNA clone IMAGE:4-167804 6	
6050	10035	261705	1.7	1.0E-91 BFM348182.1	EST_HUMAN	60202026887 NCBI_Brain6 Homo sapiens cDNA clone IMAGE:4-157804 6	
9395	18695	242	1.0E-91 H15219.1	EST_HUMAN	Amn3603.1 Saccharomyces cerevisiae infant brain 1 NIH_Homo sapiens cDNA clone IMAGE:49887 6		
1221	11130	209871	8.41	9.0E-92 A001689.1	NT	Human sapiens NCO2 gene, exon 10	
1221	11130	209872	8.41	9.0E-92 A001689.1	NT	Human sapiens NCO2 gene, exon 10	
5553	15273	26103	3.85	9.0E-92 J0007165.1	NT	Human S- K^+ -ATPase alpha-subunit mRNA, partial cds	
5442	15342	254118	1.75	9.0E-92 J142749 NT	NT	Human sapiens hypothetical protein FLJ20269 (FLJ_20269). mRNA	
5692	16759	25911	3.72	9.0E-92 AF310105.1	EST_HUMAN	Human sapiens NA1P1 mRNA, complete cds	
6878	18757	259541	19.33	9.0E-92 AB040446.1	NT	Human sapiens mRNA for KIAA1612 protein, partial cds	
6878	18757	259555	9.0E-92 AB040446.1	NT	Human sapiens mRNA for KIAA1612 protein, partial cds		
7342	17210	27409	1.66	9.0E-92 J142986 NT	NT	Human sapiens brain-derived inhibited guanine nucleotide-exchange protein 2 (B1G2), mRNA	
87	10071	168877	2.02	8.0E-92 B26367.2	EST_HUMAN	263 Human retina cDNA randomly primed cDNA - Homo sapiens cDNA	
283	10248	20969	5.9	8.0E-92 D536535.1	EST_HUMAN	B071273513F_20 Human sapiens cDNA clone IMAGE:3614667 6	
1778	11677	216554	1.26	8.0E-92 J1434722 NT	NT	Human sapiens diacylglycerol kinase, gamma (DGKG) mRNA	
56444	18849	25973	1.29	8.0E-92 AJ000679.1	NT	Human sapiens mRNA for MCF-74 gene	
69008	16736	260703	3.61	8.0E-92 L04103.1	NT	Human lens membrane protein (mpf19) gamma, exon 11	
69008	16736	260709	3.61	8.0E-92 L04103.1	NT	Human lens membrane protein (mpf19) delta, gene, exon 11	
7242	17119	233114	2.01	8.0E-92 AF014551.1	NT	Human sapiens mRNA for KIAA0111 protein, partial cds	
7760	17810	27835	1.31	8.0E-92 Y13820.1	NT	Human sapiens mRNA for MBNL protein	
8180	18637	285183	4.63	8.0E-92 AF074509.1	NT	Human sapiens nuclear mitogen- and stress-activated protein kinase-1 (MSK1) mRNA, complete cds mRNA	
8957	18596	289441	3.21	8.0E-92 AF074509.1	NT	Human sapiens dihydroxyacetone phosphate S-acetyltransferase (E2 component of 2'-oxoglutarate complex) (DLST)	
9872	19162	25298	1.43	8.0E-92 J143470 NT	NT	Human sapiens fragile X mental retardation, subunit one homolog (1) (FXR1), mRNA	
60	10046	19858	2.64	7.0E-92 M06767.1	NT	Human Willd-1 factor, plauomucin corresponding to exons 23 through 34	
236	12602	20020	2.61	7.0E-92 AF0018301.1	NT	Human sapiens mRNA for KIAA0758 protein, partial cds	
236	12602	20021	2.61	7.0E-92 AF0018301.1	NT	Human sapiens mRNA for KIAA0758 protein, partial cds	
6765	10614	21017	1.25	7.0E-92 AF007862.1	NT	Human sapiens cyclopleamic Sprouty-like isoform mRNA, complete cds	
1259	11166	21017	1.51	7.0E-92 AF007862.1	NT	Human sapiens B-cell CLL lymphoma 75 (BCL75) mRNA	

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Probe SEQ ID NO:	Exon ORF SEQ ID NO:	Expression Signal	Most Similar BLAST# (Top) HI Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2139	12027	21923	1.67	7.0E-62	5031570 NT	Homo sapiens ARIP2 (actinin-related protein 2, yeast) homolog (ACTR2), mRNA
2159	12027	21924	1.67	7.0E-62	5031570 NT	Homo sapiens ARIP2 (actinin-related protein 2, yeast) homolog (ACTR2), mRNA
2557	12391	22283	2.32	4.9E-52	AF167065.1 NT	Homo sapiens cyclin-like repeat-containing protein S62 precursor, mRNA, complete cds
2659	12569	212445	6.01	7.0E-52	6005738 NT	Homo sapiens NRAS-related gene (NRG1), mRNA
2724	12566	22481	1.04	7.0E-52	AB031007.1 NT	Homo sapiens DNA, NFE2-class 1 region, 7.1 ancestral haplotype
3301	15668	23023	0.92	7.0E-52	4807500 NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIA11) mRNA
3301	15668	23024	0.92	7.0E-52	4807500 NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIA11) mRNA
4484	14576	24146	1.61	7.0E-52	571624.1 NT	NCAN=146 kDa neural cell adhesion molecule [human], small cell lung cancer cell line OS2-R, mRNA, 2699 nt
4484	14576	24166	1.81	7.0E-52	S71824.1 NT	NCAN=146 kDa neural cell adhesion molecule [human], small cell lung cancer cell line OS2-R, mRNA, 2699 nt
5110	14878	24752	1.45	7.0E-52	45061816 NT	Homo sapiens pro-gastrin-releasing peptide receptor 1 (PRRX1), mRNA
6216	15142	24836	4.87	7.0E-52	AA448206.1 EST HUMAN	ZU968612.1 Scores: 100% Homo sapiens gDNA clone IMAGE:7811765
1569	11473	24836	0.63	6.0E-52	BE360962.1 EST HUMAN	ZU912801261 NIH:NC_44 Homo sapiens cDNA clone IMAGE:3695016 B_F
2738	12000	24944	2.45	3.0E-52	BE090747.1 EST HUMAN	ZU9150124251 NIH:NC_70 Homo sapiens cDNA clone IMAGE:3602859 G
6553	15637	26575	3.74	3.0E-52	S718336.1 EST HUMAN	ESTB1020 Synovial sarcoma Homo sapiens cDNA 5' end similar to ribosomal protein S13
8146	18634	28281	6.7	3.0E-52	X18604.1 NT	Human mRNA for alpha-actinin
8146	18634	28282	5.7	3.0E-52	X18604.1 NT	Human mRNA for alpha-actinin
23	10101	18603	1.55	4.0E-52	4651858 NT	Homo sapiens actin receptor, type II (ACTR2B), mRNA
172	0143	19898	2.93	2.0E-52	11422946 NT	Homo sapiens hypothetical protein d442023.2 (D442023.2), mRNA
732	10684	20497	1.38	2.0E-52	BE259190.1 EST HUMAN	Homo sapiens hypothetical protein d442023.2 (D442023.2), mRNA
732	10664	20408	1.38	2.0E-52	BE259190.1 NT	Homo sapiens cDNA clone IMAGE:3023304 5'
1890	11988	19959	2.74	2.0E-52	S71803.1 NT	mg-mus-related [human], GenBank, 2416 nt
1894	11789	21067	1.65	2.0E-52	N818119.1 EST HUMAN	Wk27407_X1 INCL CG4P_Bm28 Homo sapiens cDNA clone IMAGE:2413549 3 similar to TRQ12844
1894	11789	21668	1.65	2.0E-52	A8N18119.1 Q12844 BREAKPOINT CLUSTER REGION PROTEIN:	C12844 BREAKPOINT CLUSTER REGION PROTEIN:
2002	14985	21787	4.71	2.0E-52	46508590 NT	Homo sapiens synapsin (embryonic, synapsin) (SPCA), mRNA
2623	12491	22381	37.94	2.0E-52	68124537 NT	Homo sapiens calcitonin binding protein (TCA330), mRNA
3362	13470	23205	1.02	2.0E-52	AF231916.1 NT	Homo sapiens cholinesterase 21 unknown mRNA
3362	13470	23265	1.02	2.0E-52	AF231919.1 NT	Homo sapiens cholinesterase 21 unknown mRNA
3631	13546	23352	4.98	2.0E-52	56025180 NT	Homo sapiens synapsin-induced phosphoprotein 1 (Hsp70/Hsp90-organizing protein) (S1P1), mRNA

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Probe SEQ ID NC:	Exon SEQ ID NC:	ORF SEQ ID NC:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
4191	14091	23896	1.02	2.0E-52	U10978.1	NT	Human endogenous retroviral DNA (+1), complete retroviral segment	
4648	14534	24323	0.79	2.0E-52	AF136523.1	NT	Human sapiens cDNA clone Dif72p-34(CM14.5)	
6509	15694	28017	2.53	2.0E-52	AF028951.1	EST_HUMAN	Human sapiens mRNA for KIAA0686 protein, partial cds	
6420	16273		2.46	2.0E-52	AB277852.1	NT	Human NPY Y1 receptor pseudogene mRNA, complete cds	
7141	17018	217211	1.37	2.0E-52	AV340714.1	EST_HUMAN	O02711 PRO-POL-DUTTASE POLY(ADP-RIBOSE) POLYMERASE;	
6142	18030	28276	5.91	2.0E-52	U1143490.1	NT	Human sapiens thyroid stimulating hormone receptor (TSHR), mRNA	
9859	1972	23574	2.55	2.0E-52	AB205016.1	NT	Human sapiens mRNA for KIAA0686, partial cds	
9859	12497	22381	26.66	2.0E-52	6612457.1	NT	Human sapiens calcium binding protein 1 (CALB3.0), mRNA	
1807	11704	211582	1.11	1.0E-52	R780787.1	EST_HUMAN	yJ8Q08.1 (Sousa placentae N22HP) Human sapiens cDNA clone IMAGE:145574.5'	
1807	11704	21553	1.11	1.0E-52	R780787.1	EST_HUMAN	yJ8Q08.1 (Sousa placentae N22HP) Human sapiens cDNA clone IMAGE:145574.5'	
2028	11819	21610	34.72	1.0E-52	45096568	NT	Human Sapiens ribosomal protein, large, P1 (RP1.P1) mRNA	
					1g01b02.21.NQ1.CGP-QL1	Hom sapiens cDNA clone IMAGE:2107497.3 similar to SWPTNF_HUMAN	Q18525 PROTEIN-TYROSINE PHOSPHATASE 1D; contains Alu repetitive element/contains element MER17 repetitive element;	
7246	17162	27380	4.04	1.0E-52	AB360385.1	EST_HUMAN	1g01b02.21.NQ1.CGP-QL1 Hom sapiens cDNA clone IMAGE:2107497.3 similar to SWPTNF_HUMAN	Q18525 PROTEIN-TYROSINE PHOSPHATASE 1D; contains Alu repetitive element/contains element MER17 repetitive element;
7246	17162	27381	4.04	1.0E-52	AB360386.1	EST_HUMAN	1g01b02.21.NQ1.CGP-QL1 Hom sapiens cDNA clone IMAGE:2107497.3 similar to SWPTNF_HUMAN	Q18525 PROTEIN-TYROSINE PHOSPHATASE 1D; contains Alu repetitive element/contains element MER17 repetitive element;
1983	11876	21760	3.14	5.0E-53	AU121681.1	EST_HUMAN	AU121681.1 (MAM1) Human sapiens cDNA clone MAM1/MA1000738.5	
1986	11860		9.21	5.0E-53	AA316723.1	EST_HUMAN	EST188414 HCC cell line (metastasis to liver in mouse) II Human sapiens cDNA 5' end similar to ribosome protein L29	
2810	12478		1.46	5.0E-53	AF222391.1	NT	Human sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-9, and partial cds, alternatively spliced	
3563	13477	22387	0.96	5.0E-53	BE388571.1	EST_HUMAN	1g02b08.1 (NHLH1) Human sapiens cDNA clone IMAGE:3603832.5'	
8911	18719		9.8	5.0E-53	11419826.1	NT	Human sapiens ribosomal protein L7/10A, mRNA	
5975	15879	28033	2.49	5.0E-53	BF038584.1	EST_HUMAN	601469521F1 (NHLH2) Human capicua cDNA clone IMAGE:3885908.5'	
246	10212	20028	6.24	7.0E-53	AF231919.1	NT	Human sapiens cholinesterase 21 unknown mRNA	
1359	11265	21121	1.25	6.0E-53	AB011591.1	NT	Human sapiens mRNA for KIAA0686, partial cds	
1355	11260	21145	6.39	5.0E-53	AB017484.1	EST_HUMAN	wcdB08.1 (NCL.CEAP) Human sapiens cDNA clone IMAGE:2314670.3'	
1459	11364	21148	5.39	5.0E-53	AL165201.2	NT	Human sapiens cholinesterase 21 segment HS21C001	
3165	13120	22625	2.42	5.0E-53	XO2021.1	NT	Human skeletal muscle 1.3 lib mRNA for triponyxin	

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
0540	10398	20577	3.67	6.0E-93	Af057135.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PP2R1R7) gene, exon 11, complete cds and alternatively spliced product
7649	17400	27613	2.07	5.0E-03	Af2744863.1	NT	Homo sapiens secretory pathway component Sec61B-1 mRNA, alternatively spliced, complete cds
7544	17494	27715	1.31	6.0E-33	50321565.NT	Homo sapiens TAR (TAT) RNA-binding protein 1 (TARBP1) mRNA	
8200	180858	28358	3.01	5.0E-93	11415939.NT	Homo sapiens nucleophosmin 2 (NPM2) mRNA	
6487	19423	2573	1.84	5.0E-93	114117877.NT	Homo sapiens gamma-glutamyltranspeptidase 1 (GGT1) mRNA	
82	10965		4.72	6.0E-03	Af4499633.1	EST_HUMAN	22510el06_51 Scarcosin testis. NTI Homo sapiens cDNA clone IMAGE:7269585 5' similar to SWCLFA_RAT_P27297_Cat PONIN_Acidic SCORF M_
457	10381	20204	1.76	4.0E-33	4657879.NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA	
457	10381	20205	1.76	4.0E-33	4657879.NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA	
755	10885	20522	1.33	4.0E-33	7657454.NT	Homo sapiens p53cyclic (zeta/elect) homolog 1 containing BRCT domain (PEES1), mRNA	
755	10885	20523	1.33	4.0E-33	7657454.NT	Homo sapiens p53cyclic (zeta/elect) homolog 1 containing BRCT domain (PEES1), mRNA	
1166	11170	20923	2.08	4.0E-03	8622659.NT	Homo sapiens hypoxia-inducible Factor 1 (HIF1A), mRNA	
1924	11229	21712	5.06	4.0E-33	Af347677.1	NT	Homo sapiens dyotrophin (DMD) gene, deletion breakpoints -5' in intron 5
2346	12279	22176	0.84	4.0E-33	Al165301.2	NT	Homo sapiens chromosome 21 segment HS21C101 mRNA
2564	12436	22328	2.18	4.0E-33	7658972.NT	Homo sapiens interferin 18 receptor 1 (IL18R1) mRNA	
3082	13869	23947	1.44	4.0E-33	4504654.NT	NT	Homo sapiens chromosome 21 segment HS21C101 mRNA
6405	15385	28445		4.81	4.0E-33	T46884.1	y944c12.1 Strategene (ver #037224) Homo sapiens cDNA clone IMAGE:786385 5' similar to SP-A4481_A4481 SERUM RESPONSE ELEMENT-BINDING PROTEIN CDF07 5'
8476	18148	28913		19.24	4.0E-33	AV692051.1	AV692051 GKC_Homo sapiens cDNA clone GKC0R07 5'
3601	13515	23302		6.00	3.0E-03	BR0600630.1	EST_HUMAN
3601	13515	23303		5.96	3.0E-03	(5)1090500.1	EST_HUMAN
4142	14442			2.7	3.0E-33	T2268896.1	NT
65356	15452	28520		1.58	3.0E-33	Al053883.1	Homo sapiens taurin mRNA
65356	15452	28521		1.58	3.0E-33	Al053883.1	EST_HUMAN
5962	15657	26970		1.32	3.0E-03	11426182.NT	Homo sapiens GGN_ General control of amino-acid synthesis, yeast, homolog 1 like 2 (GCRN2), mRNA
8178	18066	28314		4.16	3.0E-03	Al0240289.1	W620165_x1 NC_1 C1P_GOC_Homo sapiens cDNA clone IMAGE:2304489 5'
183	10156	16970		8.31	2.0E-03	AB016610.1	Chikungunya antigenic mRNA for ribosomal protein S4X, complete cds
183	10155	16971		8.31	2.0E-03	AB016610.1	Chikungunya antigenic mRNA for ribosomal protein S4X, complete cds
320	10282	- 20100		6.69	2.0E-03	Al1652305.2	NT
321	10282	- 20100		7.68	2.0E-03	Al1652305.2	NT

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Probe SEQ ID NC:	Exon SEQ ID NC:	ORF SEQ ID NC:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
1568	11603	21063	1.48	2.0E-53	Af226586.1	NT	Homo sapiens tensin mRNA, complete cds Human Cdk-associated Rb cyclin/Cdk5/Cip mRNA, complete cds	
2083	11973	21068	1.02	2.0E-53	AB07635.1	NT	Human Cdk-associated Rb cyclin/Cdk5/Cip mRNA, complete cds	
2456	12131	22210	0.89	6.0E-53	MGC_16 Homo sapiens cDNA clone IMAGE:358420_5	EST_HUMAN	MGC_16 Homo sapiens cDNA clone IMAGE:358420_5	
5008	14956	24732	1.02	2.0E-53	BE265204.1	EST_HUMAN	601116810F1_NHL MGC_16 Homo sapiens cDNA clone IMAGE:358724_5	
6325	15245	25049	4.59	2.0E-53	AV094385.1	EST_HUMAN	ES716458 MGE sequences, MGH/Homo sapiens cDNA	
6402	15832	28542	1.52	1.0E-53	114300536	NT	Homo sapiens hypothetical protein LOC513167 mRNA	
6014	15918		1.32	2.0E-53	AV1502002.1	EST_HUMAN	U-HF-BN0-allo-9-dG-U11-NH ₂ MGC_50 Homo sapiens cDNA clone IMAGE:3078329_5	
8866	19476	23063	2.87	2.0E-53	AB12025.1	EST_HUMAN	Q92B010-1 Source: proteome. Mef2c (Homo sapiens cDNA clone IMAGE:30334_5)	
9396	19240	23070	1.52	2.0E-53	AA123755.1	EST_HUMAN	Q25C010-1 Source: proteome. Mef2c (Homo sapiens cDNA clone IMAGE:30334_5)	
9445	19095		1.31	2.0E-53	L41826.1	NT	Homo sapiens C1P17 gene, 5' end	
9724	19265		2.76	1.0E-53	BF035327.1	EST_HUMAN	601458651F1_NHL MGC_86 Homo sapiens cDNA clone IMAGE:3882068_6	
98	10081	19897	1.84	1.0E-53	AF238997.1	NT	Homo sapiens CTRP1 pseudogene	
66	10081	19889	1.64	1.0E-53	AF238987.1	NT	Homo sapiens hypothetical protein (D)323E16.1_C1, mRNA	
507	10446	20232	2.56	1.0E-53	7655706	NT	094608_XNL_C6GP_CLL1 Homo sapiens cDNA clone IMAGE:1972603_3 similar to TR-C62384 Q6Z234	
565		10823	20330	3.76	1.0E-53	AL146775.1	EST_HUMAN	ZINC FINGER PROTEIN_1
854	10781	20631	3.32	1.0E-53	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds	
1217	11125	20974	6.41	1.0E-53	-	8922370	NT	Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA
1217	11125	20975	6.41	1.0E-53	-	8922370	NT	Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA
1321	11238	21083	1.55	1.0E-53	AB046753.1	NT	Homo sapiens mRNA for KIF5B33 protein, partial cds	
1323	11230	21085	1.68	1.0E-53	AF167700.1	NT	Homo sapiens cytoskeleton-rich repeat-containing protein S62 precursor, mRNA, complete cds	
2286	12172	22070	1.01	1.0E-53	AF231981.1	NT	Homo sapiens long chain poly(olein)ated fatty acid elongation enzyme (HELO1) mRNA, complete cds	
2455	12592	22190	4.16	1.0E-53	AF050605.	NT	Homo sapiens Hsc70 class I isogen	
2459	12336		1.09	1.0E-53	AL137200.1	NT	Novel human gene mapping to chromosome 1	
2762	11191	21030	2.69	1.0E-53	BE279389.1	EST_HUMAN	6011776861_NHL MGC_17 Homo sapiens cDNA clone IMAGE:3632966_5	
2792	11191	21031	2.69	1.0E-53	BE279389.1	EST_HUMAN	6011776861_NHL MGC_17 Homo sapiens cDNA clone IMAGE:3632966_5	
2903	12830	22627	4.33	1.0E-53	DB7675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds	
4251	14223	24010	1.44	1.0E-53	AF52242	NT	Homo sapiens chitosanase 2, signal peptide NS2004_4	
5417	15338	25381	1.62	1.0E-53	U78509.1	NT	Homo sapiens glucocorticoid receptor (GRL) gene, intron D, exon 5, and intron E	
6417	15338	25382	1.62	1.0E-53	U78509.1	NT	Homo sapiens neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease) (NF1)	
5807	15832	26904	9.15	1.0E-53	455792	NT	mRNA	
5957	16051	26197	2.06	1.0E-53	1145150	NT	Homo sapiens protein kinase C, beta 1 (PRKCBB1), mRNA	

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	(Top) Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6299	16163	26320	4.09	D42072.1	NT	Human mRNA for NF1 Nisiform-exon11, complete cds	
6557	16866	26876	2.04	1.0E-63	AB0337832.1	NT	Human sapiens mRNA for KIAA1411 protein, partial cds
6971	16848	27059	1.18	1.0E-83	Y10183.1	NT	H sapiens mRNA for MEF2 protein
7024	16801	27063	1.59	1.0E-83	AF182082.1	NT	Human sapiens mRNA for KIAA1448 protein, gamma (PKC) mRNA, complete cds
7437	16450	26840	1.8	1.0E-83	AB020982.1	NT	Human sapiens mRNA for KIAA1448 protein, partial cds
7440	16453	26843	1.22	1.0E-83	AF091385.1	NT	Human sapiens mRNA, complete cds
7539	17880	27568	4.54	1.0E-63	X13474.1	NT	Human PrkA gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
7529	17880	27580	4.54	1.0E-83	X13474.1	NT	Human PrkA gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
9051	19644	26512	5.92	1.0E-63	AB26262.1	EST_HUMAN	q9m3c12.x1 NO! CGRP_Luc Homo sapiens cDNA clone IMAGE:1860/753 similar to VP17984.4 CE:13742;
9716	19257	233	1.0E-63	11417858	NT	Human sapiens mRNA for S-transferases beta 2 (GSTT2), mRNA	
9235	18787	122	0.0E+00	AL162329.2	NT	Human sapiens chromosome 21 segment HS21C009	
3880	13791	25579	1.74	1.0E-84	AF124822.1	NT	Human sapiens transcription enhancer factor 1 mRNA, complete cds
9826	19331	6256	1.67	0.0E+00	114178351	NT	Human sapiens mRNA-activated kinase 12 (MAPK12), mRNA
6296	15217	25019	3.05	0.0E+00	AB014521.1	NT	Human sapiens mRNA for KIAA0612 protein, partial cds
5206	15217	25020	3.05	0.0E+00	AB014521.1	NT	Human sapiens mRNA for KIAA0612 protein, partial cds
5969	15956	25609	1.72	0.0E+00	AJ722341	EST_HUMAN	q9z7o6.51 Scares fetal heart, N-19H19W Homo sapiens cDNA clone IMAGE:404584.3'
6153	16069	26218	1.63	0.0E+00	AB018900.1	EST_HUMAN	q9z5d05.51 Scares fetal heart, N-22H19S, Scares fetal heart, N-22H19S, Scares fetal liver cDNA clone IMAGE:1122336.3'
9361	191736	24911	4.68	0.0E+00	789398.1	EST_HUMAN	ydb604.51 Scares fetal liver cDNA clone IMAGE:1116239.3
9901	19378	24778	1.27	0.0E+00	DC5217.2	NT	Human sapiens mRNA for KIAA0027 protein, partial cds
9907	19844	126	0.0E+00	9458724	NT	Human sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF1), mRNA	
1768	11697	4.55	2.0E-34	0.000044.1	NT	Human sapiens ribosomal protein L27 mRNA, complete cds	
2621	12480	22370	0.86	1.0E-94	4506008	NT	lrr1f10.1x1 NC_ CGAP_BmC2 Homo sapiens cDNA clone IMAGE:2251403 3 similar to TR-Q12625 Q15286
4618	14506	24265	3.02	4.0E-94	AI591312.1	EST_HUMAN	PROTEIN TYROSINE PHOSPHATASE ;
6892	15798	25621	1.84	4.0E-94	11440670	NT	Human sapiens adult cardiac family 22 (cardiac cell transport), member 1-like (SLC22A1), mRNA
5802	15798	25622	1.84	4.0E-94	11440670	NT	Human sapiens adult cardiac family 22 (cardiac cell transport), member 1-like (SLC22A1L), mRNA
8749	17688	28142	1.72	4.0E-94	5675792	NT	Human sapiens hypothetical protein FLJ12455, mRNA
669	10531	26339	1.17	2.0E-94	AB022785.1	NT	Human sapiens ASH2 gene, complete cds, similar to Drosophila ash2 gene
704	10537	24852	1.17	2.0E-94	450296	NT	Human sapiens complement component 5 (C5) mRNA
1708	11607	21477	1.05	3.0E-94	AF06706.1	NT	Human sapiens cyclin-rich repeat-containing protein S22 precursor, mRNA, complete cds
1705	11607	21478	1.05	3.0E-94	AF06706.1	NT	Human sapiens cyclin-rich repeat-containing protein S22 precursor, mRNA, complete cds

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Probe Seq ID No.:	Exon seq ID No.:	ORF seq ID No.:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1735	11630	21504	3.45	3.0E-34	4.6575661	EST_HUMAN	Homeo domain protein p300 (EP300) mRNA
4095	13995	23742	0.82	3.0E-34	A464605.1	EST_HUMAN	zinc finger protein 271 (ZNF271) mRNA
5484	15403	25466	3.58	3.0E-34	114962698	NT	Home sapiens zinc finger protein 271 (ZNF271) mRNA
5881	15787	25959	4.16	3.0E-34	115162268	NT	Home sapiens chaperone client 21 open reading frame 18 (CCP18) mRNA
6771	16950	26939	1.16	3.0E-34	AF0762309.1	NT	Home sapiens procathepsin alpin 13 (PCDHA13) mRNA, complete cds
6962	16869	27002	3.79	3.0E-34	A0914579.1	NT	Home sapiens cathepsin D protease, partial cds
7553	17844	27568	4.36	3.0E-34	AF087842.1	NT	Home sapiens glycoprotein-1 mRNA, complete cds
8446	18321	26590	1.75	3.0E-34	4757821	NT	Home sapiens second transport of synaptic vesicles (ATSV) mRNA
8623	18736	28029	2.27	3.0E-34	182711.1	NT	Human cd45 truncated form 1 lacking last 2' splice site mRNA, complete cds
1431	12017	19837	2.24	1.0E-34	226171.1	EST_HUMAN	6011757625F1 NIH 3T3, 77 Human capsids cDNA clone (MAGE-353) mRNA
3050	12977	22769	1.91	1.0E-34	EST_HUMAN	6011116936F1 NIH 3T3, 19 Human capsids cDNA clone (MAGE-335) mRNA	
3050	12977	22770	1.91	1.0E-34	BE259433.1	EST_HUMAN	6011116936F1 NIH 3T3, 19 Human capsids cDNA clone (MAGE-335) mRNA
4261	14160	23938	1.13	1.0E-34	9569622	NT	Home sapiens hypophosphatase protein (EL27075) mRNA
7351	17235	27439	1.93	1.0E-34	11426770.1	EST_HUMAN	Home sapiens fox gene 5 (E-cell lineage specific activator protein) (PA/2X5) mRNA
7356	17487	27707	1.41	1.0E-34	BE750478.1	EST_HUMAN	601468748F1 NIH 3T3, 67 Human capsids cDNA clone (MAGE-397) mRNA
8418	18252	28546	2.46	1.0E-34	U85580.1	NT	Home sapiens IL-1 receptor antagonist IL-1Ra (IL-1R) gene, alternatively spliced forms, complete cds
8535	18550	28775	2.19	1.0E-34	AI272244.1	EST_HUMAN	602262021.1 Sclerulin, depositing collagen Homeostatic DNA site
8759	10117	15937	1.98	1.0E-34	BE257441.1	EST_HUMAN	6011757625F1 NIH 3T3, 17 Home sapiens cDNA clone (MAGE-383) mRNA
1461	11363	21230	1.55	1.0E-34	AF027302.1	NT	Home sapiens TNF-alpha stimulated A5C protein (A5C50) mRNA, complete cds
3118	13043	22859	1.13	5.0E-35	7962027	NT	Home sapiens KIAA0255 gene product (KIAA0255) mRNA
3118	13043	22940	1.13	5.0E-35	7962027	NT	Home sapiens KIAA0255 gene product (KIAA0255) mRNA
6801	10380	23885	1.37	5.0E-35	AF274753.1	NT	Home sapiens progressive ankylosis-like protein (ANK) mRNA, complete cds
4436	14331	24119	1.59	8.0E-35	AI700968.1	EST_HUMAN	Wsb604.1L CCAP, Li24. Homo sapiens cDNA clone (MAGE-234) mRNA, complete cds
4436	14331	24120	1.69	8.0E-35	AI700968.1	EST_HUMAN	TUBULIN ALPH-1 CHAIN (HUMAN)
6234	16158	26314	1.83	8.0E-35	111262559	NT	Home sapiens proteasome (prosome, macropain) 26S subunit, non-A7 (PSMD11) mRNA
6234	16158	26315	1.83	8.0E-35	111262559	NT	Home sapiens proteasome (prosome, macropain) 26S subunit, non-A7 (PSMD11) mRNA
6770	16649	29857	2.05	8.0E-35	AF032787.1	NT	Home sapiens cyclin-dependent kinase inhibitor 1B (CDKN1B) mRNA, complete cds
7381	17209	27515	1.73	8.0E-35	11426944	NT	Home sapiens KIAA0255 gene product (KIAA0255) mRNA
7381	17209	27516	1.73	8.0E-35	11426944	NT	Home sapiens KIAA0255 gene product (KIAA0255) mRNA
7667	17177	27744	2.82	8.0E-35	517654	NT	Home sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7681	17631	28236	2.63	0.0E-36	AB037876.1	NT	Homo sapiens mRNA for KIAA356 protein, partial cds 248401.1 Sources: Ibis, NHT. Homo sapiens cDNA clone MAGE14469 3' similar to contains 1.11 L
8086	17887	20058	2.41	0.0E-36	AF112162.1	NT	Homo sapiens developmental arteries and neural crest EGFR-like protein mRNA, complete cds impulsive element.
9869	18242	-	8.68	0.0E-35	AAU29056.1	EST_HUMAN	Homo sapiens DDX1 for amyloid precursor protein, complete cds
214	10240	20058	0.46	7.0E-35	D57975.1	NT	Homo sapiens Ly-6-like protein (CD34) mRNA, complete cds
214	10240	20059	9.46	7.0E-35	D57975.1	NT	Homo sapiens Ly-6-like protein (CD34) mRNA, complete cds
4270	14169	23947	5.94	7.0E-35	W5708.1	NT	Homo sapiens Ly-6-like protein (CD34) mRNA, complete cds
4316	14213	-	1.38	7.0E-35	AL1623246.2	NT	Homo sapiens chorionoto 21 segment [CDS] mRNA
4982	14857	24923	1.03	7.0E-35	AB9529.1	NT	Human homeobox protein (HOXA9) mRNA, 3' end
8340	15261	25087	1.76	3.0E-35	EF528041.1	EST_HUMAN	02071148P1_NOL_Cooper_Smith_Homo sapiens cDNA clone MAGE-421447 5'
9221	10847	20884	0.86	2.0E-35	4501374	NT	Homo sapiens H factor 1 complement (Hf1) mRNA
1625	11259	21387	1.6	2.0E-35	79620227	NT	Homo sapiens KIAA0256 gene product (KIAA0256). mRNA
1625	11259	21388	1.6	2.0E-35	79620227	NT	Homo sapiens KIAA0255 gene product (KIAA0255). mRNA
1987	11763	21672	7.79	2.0E-35	4907512	NT	Homo sapiens lis1us Inhibitor of metallo-spindlin-like 3 (Slys1) (lysyl phosphorylase/dihydroxyaldehyde/lysyl inflammatory) (TUNIC) mRNA
1950	11980	21676	3.3	2.0E-35	BE393873.1	EST_HUMAN	02071148P1_NOL_MSC_44 Homo sapiens cDNA clone MAGE305882 5'
2376	12256	22147	1.3	2.0E-35	54536865	NT	Homo sapiens G protein-coupled receptor 16 (GPR16) mRNA
2376	12256	22148	1.3	2.0E-35	54536865	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1)
2417	12294	22191	16.55	2.0E-35	AF240796.1	NT	Homo sapiens glycine cleavage system protein H (lumichrome carrier) (GCSH) mRNA
2466	12342	22235	2.46	2.0E-35	4758423	NT	Homo sapiens H factor 1 complement (Hf1) mRNA
2787	10846	20053	0.86	2.0E-35	4503374	NT	Homo sapiens uncharacterized mRNA_15 (OC5176). mRNA
3120	13045	22842	3.51	2.0E-35	AF105452.1	NT	Homo sapiens uncharacterized mRNA_16 (OC5177). mRNA
3517	13-33	23232	2.76	2.0E-35	7705600	NT	Homo sapiens unconventional myosin-15 (LOC5178). mRNA
3517	13-33	23233	2.76	2.0E-35	7705600	NT	Homo sapiens unconventional myosin-15 (LOC5178). mRNA
3965	13-79	23288	0.96	2.0E-35	AB037807.1	NT	qmtf02.x1 Sources: NIHMPu_ST. Homo sapiens cDNA clone IMAGE18805265 3' similar to Vip_WP_123674_CE0305;
3650	13604	23390	1.02	2.0E-35	AI250234.1	EST_HUMAN	Homo sapiens Ignephilic protein (HS252B1A) mRNA
4294	14163	21940	2.3	2.0E-35	7857195	NT	Homo sapiens KIAA0187 gene product (KIAA0187). mRNA
4671	14464	24615	2.57	2.0E-35	7861679	NT	Homo sapiens N2c1 fibroblast cell line cDNA clone IMAGE785157 5'
6022	14865	24683	0.98	2.0E-35	AA447831.1	EST_HUMAN	zcl1d07.1 Sources: zebrafish. N2c1 fibroblast cell line cDNA clone IMAGE785157 5'
5022	14865	24684	0.98	2.0E-35	AA447831.1	EST_HUMAN	Homo sapiens CG-46 protein (LOC51098). mRNA
5367	15287	25121	3.69	2.0E-35	7707834	NT	Homo sapiens Cg-46 protein (LOC51098). mRNA
5367	15287	25122	3.69	2.0E-35	7707834	NT	Homo sapiens Cg-46 protein (LOC51098). mRNA

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Probe Seq ID No.	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5734 15642	25748	259844	4.54	2.0E-95 M59724.1	NT	Human muscle-type phosphotyrosine kinase (PTK-M) gene, exon 7	
5657 15662	259179	2.25	2.0E-95 AF257737.1	NT	Homo sapiens cilary dynein heavy chain 9 (DNAH9) mRNA, complete cds		
6055 176968	28245	1.62	2.0E-95	1143573 NT	Homo sapiens bone morphogenic protein receptor, type IA (BMPRIA) mRNA		
8105 17996	19084	2.36	2.0E-95	4757853 NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1)		
9405 19385	25295	1.98	2.0E-95 AF240786.1	NT	Homo sapiens adenylylribonucleotide lyase (ALSL) mRNA		
6840 19386	25211	4.34	2.0E-95	11415164 NT	223104.1 Scores over tumor NB-HOT Homo sapiens cDNA clone IMAGE:7140075 similar to TB-11067084 (11067084_FISH42.6)		
6450 15971	28427	7.73	1.0E-95 AA284691.1	EST_HUMAN	223104.1 Scores over tumor NB-HOT Homo sapiens cDNA clone IMAGE:7140075 similar to TRC-0597084_G1067084_FISH42.6		
6450 16371	26428	7.73	1.0E-95 AA284691.1	EST_HUMAN	TRC-0597084_G1067084_FISH42.6		
6437 16298	26460	4.85	1.0E-95 BF370000.1	EST_HUMAN	RCB-FN0016-366000-011-C11 FN0016 Homo sapiens cDNA		
6437 16298	26461	4.85	1.0E-95 BF370000.1	EST_HUMAN	RCB-FN0016-366000-011-G11 FN0016 Homo sapiens cDNA		
6767 16646	26835	1.67	9.0E-96 BE97259.1	EST_HUMAN	6011437232F1_NHLJOC_72 Homo sapiens cDNA clone IMAGE:35224235		
4356 12696	20201	0.82	8.0E-96 BE007607.1	EST_HUMAN	6011497605F1_NHLJOC_70 Homo sapiens cDNA clone IMAGE:35897161		
4356 12696	20202	0.82	8.0E-96 BE007607.1	EST_HUMAN	6011497605F1_NHLJOC_70 Homo sapiens cDNA clone IMAGE:35897161		
5583 15302	20202	2.66	8.0E-96 AV856047.1	EST_HUMAN	PMA0-L700150-000500-002-d09 L700150 Homo sapiens cDNA		
3834 13746	23563	0.95	7.0E-96 AF231962.1	EST_HUMAN	PM01-H7059-25/200-002-d07 H7059 Homo sapiens cDNA		
2223 12069	22003	0.85	6.0E-96 BE171962.1	EST_HUMAN	Homo sapiens chromosomal 21 unknown mRNA		
3276 13197	22697	0.05	6.0E-96 AL16201.2	EST_HUMAN	Homo sapiens chromosomal 21 segment HSZ2C001		
3437 13354	28159	2.19	6.0E-96 M8873.1	NT	Human glyceraldehyde-3-phosphate dehydrogenase pseudogene 3 (end)		
8831 18644	28927	1.68	6.0E-96	7682289 NT	Homo sapiens KIAA0783 gene product (KIAA0783). mRNA		
8831 18644	28926	2.09	6.0E-96	7682289 NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2). mRNA		
6870 18692	28972	2.77	5.0E-96 AB032698.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds		
317 10279	20059	3.06	5.0E-96 AB032698.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds		
824 10751	20610	3.06	5.0E-96 AB032698.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds		
2578 12447	2.31	5.0E-96	11416767 NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, epsilon (PDE6A). mRNA			
2591 12819	22713	0.95	5.0E-96	6971735 NT	Homo sapiens transmembrane potential channel 6 (TRPC5). mRNA		
4851 14894	1.22	5.0E-96 X08612.1	NT	H.sapiens DNA for monooxygenase type 1 (CYP1A1).			
6005 16048	26193	4.23	5.0E-96	11424399 NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1). mRNA		
6005 16048	26194	4.23	5.0E-96	11424399 NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1). mRNA		
6719 16659	26788	1.81	5.0E-96	1168347.1	Human type IV collagenase (CL-G4B) gene, exon 5		
6719 16598	26789	1.81	5.0E-96	1168347.1	Human type IV collagenase (CL-G4B) gene, exon 5		

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Table 4
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Probe	Exon	ORF SEQ ID NO:	ORF SEQ ID NO:	Exon SEQ ID NO:	Most Similar BLAST E Value	Top Hit Ht Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4067	1397	10355	6.22	3.0E-06	1685965_1	4.603098	EST_HUMAN	y87H2.11 Scores field for spleen INF-S Heme sulphate DNA clone MAGE21212327 5'	
4068	1062	20464	1.56	2.0E-06	AL165274.2	2.148	EST_HUMAN	Homo sapiens chromosome 21 segment H21c148	
730	1062	24336	1.58	2.0E-06	BE1449074.1	2.147	EST_HUMAN	Homo sapiens cDNA clone GBCM0075	
4051	14537	17058	5.08	2.0E-06	AV685467	2.146	EST_HUMAN	Homo sapiens cDNA clone GBCM0075	
7191	18020	20408	1.69	1.0E-06	AV216404.1	2.145	EST_HUMAN	Homo sapiens cDNA clone MAGE2351331 5'	
655	10590	1242	2.03	1.0E-06	AV18590.1	2.145	EST_HUMAN	Homo sapiens cDNA clone GBCM0075	
1742	16843	21511	2.03	1.0E-06	AV1685694.1	2.145	EST_HUMAN	Homo sapiens cDNA clone GBCM0075	
1742	16843	21580	0.89	1.0E-06	4905755	2.145	EST_HUMAN	Homo sapiens containing microcytogenase 2 (FM02) mRNA	
1806	11703	21581	0.89	1.0E-06	4905756	2.145	EST_HUMAN	Homo sapiens flavin containing microcytogenase 2 (FM02) mRNA	
2181	12068	21970	1.33	1.0E-06	N75687.1	2.145	EST_HUMAN	Homo sapiens hepatocyte growth factor gene, exon 1	
2181	12068	21970	1.33	1.0E-06	N75697.1	2.145	EST_HUMAN	Homo sapiens hepatocyte growth factor gene, exon 1	
2219	12850	22056	1.88	1.0E-06	U51472.2	2.145	EST_HUMAN	Fibroblast superfast myosin heavy chain (shy-HC) mRNA, complete cds	
7058	15635	27125	20.65	1.0E-06	1141949	2.145	EST_HUMAN	Homo sapiens similar to betaine dehydrogenase phosphotriphosphatase mRNA	
7138	17045	27208	1.98	1.0E-06	AF277483.1	2.145	EST_HUMAN	Homo sapiens secretory pathway component Sec21B-1 mRNA, alternative spliced, complete cds	
7843	17653	27938	1.84	1.0E-06	AB033118.1	2.145	EST_HUMAN	Homo sapiens mRNA for KIAA1260 protein, partial cds	
7843	17653	27939	1.64	1.0E-06	AB033118.1	2.145	EST_HUMAN	Homo sapiens mRNA for KIAA1260 protein, partial cds	
3265	13206	23006	0.95	1.0E-06	BF27240.1	2.145	EST_HUMAN	Homo sapiens cDNA clone MAGE4081202 5'	
6459	10319	26747	2.73	0.9E-07	AL045314.2	2.145	EST_HUMAN	DKZ37474.10 (DK02325.1)-3 (Synonym: H35) Homo sapiens cDNA clone DKZP-A3N0323 5'	
6667	16562	26804	10.79	0.9E-07	AL0418026.1	2.145	EST_HUMAN	N6106317-07 (DK02325.1)-3 (Synonym: H35) Homo sapiens cDNA clone DKZP-A3N0323 5'	
6735	16814	27643	2.70	0.9E-07	BF154942.1	2.145	EST_HUMAN	DKZ37474.10 (DK02325.1)-3 (Synonym: H35) Homo sapiens cDNA clone DKZP-A3N0323 5'	
8832	18645	28930	1.87	0.9E-07	BE004469.1	2.145	EST_HUMAN	GMO-BN1016-7 (DK02325.1)-3 (Synonym: H35) Homo sapiens cDNA clone GBCM0075	
8832	18645	28930	1.20	0.9E-07	BE004469.1	2.145	EST_HUMAN	GMO-BN1016-7 (DK02325.1)-3 (Synonym: H35) Homo sapiens cDNA clone GBCM0075	
8832	18645	28930	1.08	0.9E-07	5455752	2.145	EST_HUMAN	Homo sapiens briefcase A-inhibited guanine nucleotide exchange protein 2 (GAP2), mRNA	
1868	11764	21558	6.1	0.9E-07	Y11392.1	2.145	EST_HUMAN	Homo sapiens mRNA for GAP2, 6S-glycoprotein, long form	
6082	16021	26167	1.41	0.9E-07	Y11392.1	2.145	EST_HUMAN	Homo sapiens mRNA for GAP2, 6S-glycoprotein, long form	
6867	16746	26839	1.41	0.9E-07	Y11392.1	2.145	EST_HUMAN	Homo sapiens mRNA for KIAA0584 protein, viral oncogene homolog (SRC), mRNA	
7328	17232	21453	1.17	0.9E-07	AB001196.1	2.145	EST_HUMAN	Homo sapiens mRNA for KIAA0584 protein, partial cds	

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Probe SEQ ID NC:	Exon SEQ ID NC:	ORF SEQ ID NC:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7328 17222	27454	1.76	4.0E-97	AB011166.1	NT	Human sapiens mRNA for KIAA0564 protein, partial cds	Human sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
8603 18376	28641	1.17	4.0E-97	11865122	NT	Human sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA	Human sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
8903 18376	28642	1.76	4.0E-97	AB042857.1	NT	Human sapiens mRNA for KIAA0564 protein, partial cds	Human sapiens mRNA for KIAA0564 protein, partial cds
8733 17882	28124	1.68	4.0E-97	AB033116.1	NT	Human sapiens mRNA for KIAA1260 protein, partial cds	Human sapiens mRNA for KIAA1260 protein, partial cds
8736 17885	28126	2.31	4.0E-97	AB033116.1	NT	Human sapiens mRNA for KIAA1260 protein, partial cds	Human sapiens mRNA for KIAA1260 protein, partial cds
8736 17885	28120	2.31	4.0E-97	AB033116.1	NT	Human sapiens G-2 and Sphases expressed 1 (GSE1), mRNA	Human sapiens G-2 and Sphases expressed 1 (GSE1), mRNA
6331 16912	1020	3.83	1.14E-98	NT	NT	Human sapiens mRNA for KIAA1172 protein, partial cds	Human sapiens mRNA for KIAA1172 protein, partial cds
243 20026	1.17	3.0E-97	AB032098.1	NT	NT	Human sapiens amyloid beta (A4) precursor protein (protease neprilin, Alzheimer disease) (APP), mRNA	Human sapiens amyloid beta (A4) precursor protein (protease neprilin, Alzheimer disease) (APP), mRNA
856 10785	20653	10.98	3.0E-97	48021609	NT	Human sapiens amyloid beta (A4) precursor protein (protease neprilin, Alzheimer disease) (APP), mRNA	Human sapiens amyloid beta (A4) precursor protein (protease neprilin, Alzheimer disease) (APP), mRNA
265 10783	20534	10.96	3.0E-97	48021606	NT	Human sapiens N-myristoyl tRNA (NMT) synthetase (NMT), mRNA	Human sapiens N-myristoyl tRNA (NMT) synthetase (NMT), mRNA
1423 12894	21195	1.77	3.0E-97	1362525.1	NT	Human beta-prime-beta-tubulin (BTB22) gene, exon 7	Human beta-prime-beta-tubulin (BTB22) gene, exon 7
2389 12862	22161	1.92	3.0E-97	1362525.1	NT	Human sapiens pellino1 (PCNT) mRNA	Human sapiens pellino1 (PCNT) mRNA
3223 13147	22948	1.14	3.0E-97	5174478	NT	Human sapiens selenoprotein translation elongation factor 1 alpha 1 (EEF1A1) mRNA	Human sapiens selenoprotein translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4470 14565	24349	12.55	1.0E-97	48023470	NT	691539520F11 NH_1 KOC_53 Human elastase cDNA clone WAGE_3681821_5	691539520F11 NH_1 KOC_53 Human elastase cDNA clone WAGE_3681821_5
6577 16779	23867	2.19	1.0E-97	BE056498.1	EST_HUMAN	Human sapiens KIAA0549 gene product (KIAA0549), mRNA	Human sapiens KIAA0549 gene product (KIAA0549), mRNA
8088 17979	28229	3.41	1.0E-97	11427767	NT	Human sapiens KIAA0549 gene product (KIAA0549), mRNA	Human sapiens KIAA0549 gene product (KIAA0549), mRNA
8058 28230	17970	2.82	1.0E-97	11427757	NT	Human sapiens C0GAAP_C011 Human sapiens cDNA clone IMAGE:10146922_3'	Human sapiens C0GAAP_C011 Human sapiens cDNA clone IMAGE:10146922_3'
8620 18464	20768	13.54	1.0E-97	11426272	NT	Human sapiens fibromodulin protein S15 (RP315), mRNA	Human sapiens fibromodulin protein S15 (RP315), mRNA
6763 17912	26156	13.54	1.0E-97	11426272	NT	Human sapiens fibromodulin protein S15 (RP315), mRNA	Human sapiens fibromodulin protein S15 (RP315), mRNA
8763 17912	26157	13.54	1.0E-97	11426272	NT	Human sapiens fibromodulin protein S15 (RP315), mRNA	Human sapiens fibromodulin protein S15 (RP315), mRNA
883 10809	20658	8	9.0E-98	BE060973.1	EST_HUMAN	PMM-B/T0724-01040-005-a/2 B1/0724 Human sapiens cDNA	PMM-B/T0724-01040-005-a/2 B1/0724 Human sapiens cDNA
1255 11162	21012	1.29	9.0E-98	63805022	NT	Human sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA	Human sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA
6923 16820	26591	4.74	9.0E-98	4758119	NT	Human sapiens death-associated protein (DAP), mRNA	Human sapiens death-associated protein (DAP), mRNA
6923 16820	26592	4.74	9.0E-98	4758119	NT	Human sapiens death-associated protein (DAP), mRNA	Human sapiens death-associated protein (DAP), mRNA
7271 17148	27342	2.77	9.0E-98	AB05199.1	NT	Human mRNA for amyloid A4 (A4) protein	Human mRNA for amyloid A4 (A4) protein
7319 17195	27385	2.41	9.0E-98	1132450	NT	Human sapiens succinate-CoA ligase, GCF-forming, alpha subunit (SUCLG1), mRNA	Human sapiens succinate-CoA ligase, GCF-forming, alpha subunit (SUCLG1), mRNA
7355 17223	27423	1.39	9.0E-98	AB037785.1	NT	Human sapiens mRNA for KIAA1065 protein, partial cds	Human sapiens mRNA for KIAA1065 protein, partial cds
8699 18246	28407	2.24	9.0E-98	AB0232221	NT	Human sapiens mRNA for KIAA1065 protein, partial cds	Human sapiens mRNA for KIAA1065 protein, partial cds
8599 18246	28448	2.24	9.0E-98	AB0232221	NT	Human sapiens mRNA for KIAA1065 protein, partial cds	Human sapiens mRNA for KIAA1065 protein, partial cds
9445 10809	20538	4.97	9.0E-98	BE060973.1	EST_HUMAN	PMM-B/T0724-01040-005-a/2 B1/0724 Human sapiens cDNA	PMM-B/T0724-01040-005-a/2 B1/0724 Human sapiens cDNA
1350 11265	21112	0.89	8.0E-98	AB035768.1	NT	Human sapiens IP40-codony 10 minRNA for peptidearginine deiminase type 1, complete cds	Human sapiens IP40-codony 10 minRNA for peptidearginine deiminase type 1, complete cds
1540 11444	21303	1.04	8.0E-98	5034810	NT	Human sapiens L2-inducible T-cell kinase (ITK), mRNA	Human sapiens L2-inducible T-cell kinase (ITK), mRNA

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Probe SEQ ID NO.	Exon ID NO.	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1640	11444	21304	1.04	8.0E-98	5031810	NT	Human sapiens IL2-inducible T-cell kinase [ITK] mRNA
1695	11597	21468	0.98	8.0E-98	AB17007.1	NT	Human sapiens PM23.6 mRNA, partial cds
1695	11597	21469	0.98	8.0E-98	AB17007.1	NT	Human sapiens PM23.6 mRNA, partial cds
3725	13630	23424	5.03	8.0E-98	JG466.1	NT	Human mitochrondrial creatine kinase [CKM] gene, complete cds
5049	14921	8021	0.88	8.0E-98	AL16291.2	NT	Human sapiens chromosomal 21 segment HS2.5001
9717	192358	28220	1.29	8.0E-98	BE34877.1	EST_HUMAN	Human sapiens cDNA clone IMAGE:18589_3'
2131	20119	219170	1.21	8.0E-98	AA05124.1	EST_HUMAN	AA05124.3.4 downregulated in Myxoma carcinoma Human sapiens cDNA clone IMAGE:18589_3'
2655	12456	22329	1.85	8.0E-98	AB1514607.1	NT	Human sapiens mRNA for XMAA07 protein, partial cds
2220	12823	22823	2.09	8.0E-98	AA077498.1	EST_HUMAN	731-H-01 Chromosome 7,Fetal Brain cDNA Library Human sapiens cDNA clone IMAGE:18501
6147	16202	26159	1.7	3.0E-98	11415210	NT	Human sapiens activator of S phase kinases (ASK) mRNA
6147	16202	26160	1.7	3.0E-98	11415210	NT	Human sapiens activator of S phase kinase (ASK) mRNA
7083	18660	27153	3.31	3.0E-98	AA05098.1	EST_HUMAN	y07g09_r1 Scores total train IBS26-B557 Human sapiens cDNA clone IMAGE:178240_5'
7685	17635	27759	1.6	3.0E-98	AA05124.1	EST_HUMAN	AA05124.3.4 downregulated in Myxoma carcinoma Human sapiens cDNA clone IMAGE:178240_5'
7685	17635	27760	1.6	3.0E-98	AA05124.1	EST_HUMAN	AA05124.3.4 downregulated in Myxoma carcinoma Human sapiens cDNA clone IMAGE:178240_5'
8322	18196	28448	6.16	3.0E-98	U6309.1	NT	Human fumate reductase (FR) mRNA, nuclear gene encoding mitochondrial protein, complete cds
9495	19373	21816	2.47	3.0E-98	11415177	NT	Human sapiens Ran GTPase activating protein 1 (RANGAP1) mRNA
2033	11924	21905	29.05	2.0E-98	BE204281.1	EST_HUMAN	Human MOC-1 NH ₂ -MOC-1 NH ₂ fragment mRNA IMAGE:35283184_5'
2191	12076	21983	1.45	2.0E-98	AL1629022.2	NT	Human sapiens chromosome 21 segment HS2.5002
4199	14098	28860	0.98	2.0E-98	AF232897.1	NT	Human sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4244	14143	23946	4.94	2.0E-98	4755331	NT	Human sapiens fatty-acid-Coenzyme A-glyceride long-chain 1 (FACL1) mRNA
4720	14006	24350	1.51	2.0E-98	AF219802.1	NT	Human sapiens actinin precursor (ATRN) gene, exon 16
4720	14806	24361	1.51	2.0E-98	AF219802.1	NT	Human sapiens low density lipoprotein receptor related protein cleaved in tumor (LRP-DT) mRNA
5059	14959	24711	6.39	2.0E-98	60525299	NT	Human sapiens low density lipoprotein receptor related protein cleaved in tumor (LRP-DT) mRNA
5163	15209	24795	1.08	2.0E-98	4755375	NT	Human sapiens protein tyrosine kinase 2 beta (PTK2) mRNA
6303	15224	26028	4.68	2.0E-98	7705612	NT	Human sapiens PDZ-domain-containing gamma nucleotide exchange factor (LOC51755) mRNA
7004	18881	27073	3.87	2.0E-98	11428913	NT	Human sapiens SH3-domain GRB2-like 1 (SH3GL2) mRNA
7004	18881	27074	3.87	2.0E-98	11428913	NT	Human sapiens SH3-domain GRB2-like 1 (SH3GL2) mRNA
7497	17867	27572	1.5	2.0E-98	X12864.1	NT	H.sapiens arginase gene exon 3 (EC 3.5.3.5)
7861	17801	77056	1.18	2.0E-98	77056867	NT	Human sapiens ALM protein (ALM1) mRNA
9359	19026	26301	1.43	2.0E-98	11439647	NT	Human sapiens chromosome 12 open reading frame 3 (C12orf3-3) mRNA
399	10346	20172	18.93	1.0E-98	AB20027.1	EST_HUMAN	Ide2a4-1 NOLCCD_H Human sapiens cDNA clone IMAGE:2261743_3' similar to SW-RL2B_HUMAN
							I28516065 RIBOSOMAL PROTEIN_29A_;

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID No:	Exon SEQ ID No:	ORF SEQ ID No:	Expression Signal	Most Similar BLAST-E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6844	16723		5.37	2.0E-56	M065956.1	NT	Human E24H11.1 fusion protein (E24H11.1) mRNA, complete cds NP006021.1 NCI COAP HMG Homo sapiens cDNA clone IMAGE:2739674 3' similar to gb M51212 NY005N
1219	11128		3.46	2.0E-56	W0747489.1	EST_HUMAN	LIGHT CHAIN PROTEIN-LIKE 1 mRNA, complete cds Human KU (p70/p80) subunit mRNA, complete cds
3220	13144	22247	1.08	2.0E-56	M050385.1	NT	Human sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HAD-HSC) gene, nuclear gene encoding mitochondrial protein, complete cds
4443	14337	24127	3.16	2.0E-56	A07657035.1	NT	Human sapiens fibulin 1B (FLNB) mRNA, complete cds NP006111.1 Scares felis longi (NH1.1W) Homo sapiens cDNA clone IMAGE:308355 5' similar to gb M16122 BETA2-GLUCURONIDASE PRECURSOR (HUMAN);
7033	10830	27121	9.75	2.0E-56	W28507.1	EST_HUMAN	Human sapiens myelin X (MYO10) mRNA, complete cds NM_003833.1
8451	18234	28933	3.93	2.0E-56	A0724767.2	NT	Human sapiens interferon-lambda 3 (ISVL) mRNA, complete cds NM_003839.1
312	10274	20063	1.53	1.0E-56	A07144867.1	NT	Human sapiens GA-binding protein 1 (GABP1) mRNA, complete cds NM_003840.1
376	10329	20162	1.04	1.0E-56	11621650.1	NT	Human sapiens GATA-binding protein 1 (GATA1) mRNA, complete cds NM_003846.1
1401	11306	21108	2.11	1.0E-56	M050385.1	NT	Human sapiens truncated Niemann-Pick C2 protein (NPC3) mRNA, complete cds NM_003850.1
1637	11441	21288	1.47	1.0E-56	A07625223.1	NT	Human sapiens truncated Niemann-Pick C2 protein (NPC3) mRNA, complete cds NM_003851.1
1557	11441	21289	1.47	1.0E-56	A07625223.1	NT	Human sapiens FR606-binding protein 6 (36kD) (FR6BP6) mRNA, and translated products NM_003852.1
1885	11781	21656	1.1	1.0E-56	4950730.1	NT	Human sapiens FR606-binding protein 6 (36kD) (FR6BP6) mRNA, and translated products NM_003853.1
3046	12873	22766	0.89	1.0E-56	J03171.1	NT	Human interferon-alpha receptor (IFN-Alpha-Reo) mRNA, complete cds NM_003854.1
4235	14182	23690	2.74	1.0E-56	A0768018.1	NT	Human sapiens fatty acid hydrolase (FAAH) gene, exon 14 NM_003855.1
4283	14182	23961	2.74	1.0E-56	A0768018.1	NT	Human sapiens fatty acid hydrolase (FAAH) gene, exon 14 NM_003856.1
6220	15003		1.18	1.0E-56	AL1632351.1	NT	Human sapiens chromosome 21 segment HS21-C081 NM_003857.1
7305	17181		1.15	1.0E-56	11419721	NT	Human sapiens ALX1 protein (LOC51309) mRNA NM_003858.1
7483	17763	277657	1.68	1.0E-56	AN340714.1	EST_HUMAN	HS02711 PRO-POLY(ADIPATE POLYPYRROLE)- Glycine-rich RNA, complete cds NM_003859.1
8953	18571	28954	2.4	1.0E-56	A0762322.1	NT	Human sapiens glutathione S-transferase theta 1 (GSTT1) NM_003860.1
9126	18894		3.76	1.0E-56	AP2407885.1	NT	Human sapiens chromosome 21 segment HS21-C047 NM_003861.1
1	9890	19780	1.13	1.0E-56	AL163247.2	NT	Human sapiens chromosome 21 segment HS21-C047 NM_003862.1
2	9895	19780	1.93	1.0E-56	11419720	NT	Human sapiens chromosome 21 segment HS21-C047 NM_003863.1
62	10048	19869	1.48	1.0E-56	11419720	NT	Human sapiens Tissue-specific X-linked protein (XKRN) mRNA NM_003864.1
81	10096	19883	1.62	1.0E-56	AL163205.2	EST_HUMAN	Human sapiens Brn3a mRNA NM_003865.1
182	13135	19850	1.16	1.0E-56	AL163205.2	NT	Human sapiens chromosome 21 segment HS21-C005 NM_003866.1
314	10276	20056	1.01	1.0E-56	AL163249.2	NT	Human sapiens chromosome 21 segment HS21-C049 NM_003867.1
340	10289	20174	2.43	1.0E-56	T06587.1	EST_HUMAN	EST/T06576 Full length, Strategene (cat#603030) Human testis cDNA clone HF80R32

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Single Exon Probes Expressed in Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal Value	Most Similar BLAST-E Value	Top Hit-Acces No.	Top Hit Database Source	Top Hit Description	
430	10375		1.63	1.0E-100	Af005328.1	NT	Human sapiens X-linked amniotic epidermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions	
481	10425		7.04	1.0E-100	X86531.1	NT	G derivative DNA for Zfh80 gene homolog	
500	10442	20255	4.17	1.0E-100	BE163090.1	EST - HUMAN	IFI35/H10625-M0500-0122-209-H Homo sapiens cDNA	
1002	10520	20763	2.43	1.0E-100	7861665	NT	Human sapiens DIF2P-3808M0122-209-H Homo sapiens cDNA	
1002	10280	20764	1.20	1.0E-100	7861665	NT	Human sapiens DIF2P-3808M0122-209-H Homo sapiens cDNA	
1528	11433		1.33	1.0E-100	AW207558.1	EST - HUMAN	U1+Bit shift<0>-0.011+NCL CGAP SubS Homo sapiens cDNA clone IMAGE:27221843' quaternary cDNA clone, NCL Homo sapiens cDNA clone IMAGE:1754033 3' similar to SW CYT_COT_JA1	
1533	11437		2.204	1.46	1.0E-100	AH200867.1	EST - HUMAN	P4600 COSTATIN
2195	12082		1.46	1.0E-100	D8349.1	NT	Fat mRNA, for short type PB-cadherin, complete cds	
2388	12297		221.90	1.08	1.0E-100	X62498.1	NT	H-sapientina mRNA for IFN-gamma (IFNG) mRNA
2674	12359	22429	1.87	1.0E-100	11419876	NT	Human sapiens KIAA0957 protein (KIAA0957) mRNA	
2685	12613		2.45	1.0E-100	D11078.1	NT	Human sapiens RHG-2 gene, retinolase-like element	
4116	14016	23735	1.49	1.0E-100	AF057354.1	NT	Human sapiens myoblastin (myoblastin-related protein) 1 cDNA, parallel cds	
4143	14043	28519	1.87	1.0E-100	4500732	NT	Human sapiens fallopian tube-stimulating hormone (FSH) mRNA	
5024	14897	24665	3.07	1.0E-100	5032164	NT	Human sapiens small oviductal (Drosophila) homolog (SO LH) mRNA	
5024	14897	24666	3.07	1.0E-100	50321204	NT	Human sapiens small oviductal (Drosophila) homolog (SO LH) mRNA	
5232	15156	24924	1.0	1.0E-100	BF244218.1	EST - HUMAN	601185164/F1 NIH 3T3/MC_57 Homo sapiens cDNA clone IMAGE:4080298 5'	
5495	15415	25478	1.4	1.0E-100	AU181822.1	EST - HUMAN	601185162/F1 NIH 3T3/MC_57 Homo sapiens cDNA clone IMAGE:4080298 5'	
5514	15432	25490	1.55	1.0E-100	AF381424.1	NT	Human sapiens NF-E2-related factor 2 gene, complete cds	
5915	15821	25946	5.1	1.0E-100	AU140214.1	EST - HUMAN	AU140214/PLAC2 Homo sapiens cDNA clone PLAC2/2005137 5'	
0015	15910	26049	1.47	1.0E-100	B10867.1	EST - HUMAN	V3560B.1 Seven fetal liver cDNA clones IMAGE:1219134 3'	
6113	16010	26146	1.4	1.0E-100	BF575478.1	EST - HUMAN	MRF-TN0046-050900-001-465 TN0046 Homo sapiens cDNA	
6116	16013	26147	1.4	1.0E-100	BF575478.1	EST - HUMAN	MRF-TN0046-060900-001-465 TN0046 Homo sapiens cDNA	
6119	16013	26151	0.99	1.0E-100	X04571.1	NT	Human mRNA for kidney epithelial growth factor (EGF)-precursor	
6063	16841	27053	6.19	1.0E-100	BF030835.1	EST - HUMAN	601647347/F1 NIH 3T3/Homo sapiens cDNA clone IMAGE:5931310 5'	
6083	16860		5.44	1.0E-100	AI163203.2	NT	Human sapiens chondrocanine 21 segment mRNA HS21/2003	
7322	17198		3.2	1.0E-100	AB040918.1	NT	Human sapiens mRNA for KIAA1455 protein, partial cds	
7369	17347		1.53	1.0E-100	AB72388.1	EST - HUMAN	W37509.X1 NCL CGAP SubS Homo sapiens cDNA clone IMAGE:2480120 3' similar to contains element	
7425	16339	26625	1.67	1.0E-100	AB045861.1	EST - HUMAN	PMR-BN005-1003801-005 BN005 Homo sapiens cDNA	
7527	17378	27587	1.73	1.0E-100	AB045861.1	NT	Human sapiens mRNA for KIAA1625 protein, partial cds	
7527	17378	27588	1.73	1.0E-100	AB045861.1	NT	Human sapiens mRNA for KIAA1625 protein, partial cds	
7084	17514	27740	1.69	1.0E-100	AW504047.1	EST - HUMAN	Inducin1.y1 NCL CGAP SubS Homo sapiens cDNA clone IMAGE:2696395 5'	

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Table A

Single Exon Promoters Expressed in Heart

Probe No.	Exam ID No.	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Human		Top Hit Human	Human orthologous reference mRNA	Human orthologous reference cDNA clone IMAGE:21663586 5'
							Top Hit BLAST E Value	Top Hit Accession No.			
7854	17544	27741	1.06	1.0E-100	AMWS00487.1	EST_HUMAN	1.29	1.0E-100	AT10391.1	NT	NT
							8.07E-05	AF024728.2	NT	EST_HUMAN	NT
8141	18200	28275	5.23	1.0E-100	BF-228275.1	EST_HUMAN	2.14	1.0E-100	X94653.1	NT	MRP-BN0070/270300-008-111 BN0070 Homo sapiens cDNA
							184.73	28745	NT	NT	H sapiens CD97 gene exon 4
86906	18473	28746	2.14	1.0E-100	X94653.1	EST_HUMAN	4.55	1.0E-100	AF111170.3	NT	H sapiens CD97 gene exon 4
							185.49	28831	NT	NT	Homo sapiens 14632_lage2 gene, complete cds; and unknown gene
86905	18549	28832	4.55	1.0E-100	AF111170.3	EST_HUMAN	4.55	1.0E-100	AF111170.3	NT	Homo sapiens 14632_lage2 gene, complete cds; and unknown gene
							86906	18549	NT	NT	Homo sapiens chromosome 21 segment 1 HS2CA7
86988	19780	19780	1.95	1.0E-100	AL052827.2	EST_HUMAN	1.95	1.0E-100	AL052827.2	NT	Homo sapiens griffithia protein, gene, complete cds
							86330	18738	NT	NT	Homo sapiens glutathione S-transferase theta 2 GSTT2 and glutathione S-transferase theta 1 GSTT1
86448	18832	26112	5.59	1.0E-100	AF262825.1	EST_HUMAN	2.21	1.0E-100	AF247086.1	NT	Homo sapiens SH3-domain binding protein 1; microtubule-associated protein 1C (MAP1C); mRNA
							86511	19227	NT	NT	Homo sapiens transducin beta chain; microtubule-associated protein 1C (MAP1C); mRNA
98440	19409	25161	3.38	1.0E-100	AF247074.1	EST_HUMAN	1.22	1.0E-100	AF247074.1	NT	Homo sapiens SEC41 (S- cerevisiae)-like 2 SEC41(L2); mRNA
							70	10055	19872	NT	Homo sapiens SEC41 (S- cerevisiae)-like 2 SEC41(L2); mRNA
671	10908	20422	1.15	1.0E-100	AB007915.2	EST_HUMAN	1.22	1.0E-100	AF247074.1	NT	Homo sapiens ventral anterior homeobox 2 (VA(X2)); mRNA
							688	10821	20447	NT	Homo sapiens ventral anterior homeobox 2 (VA(X2)); mRNA
7764	10884	20521	4.45	1.0E-100	AF247074.1	EST_HUMAN	4.45	1.0E-100	AF247074.1	NT	Homo sapiens phosphatidylcholine acetyltransferase, phosphatidylserine acetyltransferase, phosphatidylserine acetyltransferase (GART) mRNA
							835	10762	20612	NT	Homo sapiens of cardiac alpha/beta myosin heavy chain gene
908	10832	20670	3.44	1.0E-100	AF220561.1	EST_HUMAN	3.44	1.0E-100	AF220561.1	NT	6001534-02 B1 HMG-81 Homo sapiens cDNA clone IMAGE:21663586 3'
							996	10822	20711	NT	NT
1036	10854	20766	1.63	1.0E-100	AF217678.1	EST_HUMAN	1.63	1.0E-100	AF217678.1	NT	NT
							1712	11613	21483	NT	NT
1712	11613	21483	0.87	1.0E-100	AF217678.1	EST_HUMAN	0.87	1.0E-100	AF217678.1	NT	NT
							1901	11797	21484	NT	NT
2010	11602	21782	1.6	1.0E-100	AF245070.1	EST_HUMAN	1.6	1.0E-100	AF245070.1	NT	NT
							2301	12107	22000	NT	NT
2572	12443	22355	4.4	1.0E-100	AF220561.1	EST_HUMAN	4.4	1.0E-100	AF220561.1	NT	H sapiens EWS gene, exon 5
							2714	12870	22448	NT	Homo sapiens RBBR (gene (partial), exon 12)
2714	12870	22448	2.56	1.0E-100	AF237744.1	EST_HUMAN	2.56	1.0E-100	AF237744.1	NT	Homo sapiens RBBR (gene (partial), exon 12)
							2825	12952	22523	NT	Homo sapiens gamma-dystrophin/laminin receptor (GDN) mRNA
2825	12952	22523	12.14	1.0E-100	AF220561.1	EST_HUMAN	12.14	1.0E-100	AF220561.1	NT	Homo sapiens gamma-dystrophin/laminin receptor (GDN) mRNA

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Table 4
Single Exon Probes Express

Probe No.	Exon Seq ID No.: NC_	ORF Seq ID No.: NC_	Expression Signal Value	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Descriptor	Top Hit Database Source	
							EST	HUMAN
3203	131277		2.16	1.0E-01	BF035327.1			
3204	12054	23059	1.97	1.0E-01	AV195556.1	EST-HUMAN	EST17229 MAGE:responesogen, (MAGE) From sapiens cDNA	
3354	12576	23498	1.75	1.0E-01	AJ237744.1	EST-HUMAN	EST17229 MAGE:responesogen, (MAGE) From sapiens cDNA	
3354	12576	23499	1.75	1.0E-01	AB022785.1	EST-HUMAN	Hom sapiens RISIR gene (parita), exon 12	
3800	13712	23149	4.83	1.0E-01	AB022785.1	EST-HUMAN	Hom sapiens ASH2L gene, complete cda, similar to Drosophila ash2 gene	
4965	14840	24619	1.67	1.0E-01	5622460	EST-HUMAN	Hom sapiens blyophilin, subfamily 2, member A1 (BT21A1) mRNA	
4965	14840	24610	1.67	1.0E-01	5622460	EST-HUMAN	Hom sapiens blyophilin, subfamily 2, member A1 (BT21A1) mRNA	
5657	16179	23934	1.4	1.0E-01	AV195556.1	EST-HUMAN	EST17229 MAGE:responesogen, (MAGE) From sapiens cDNA	
5657	15663	28658	3.73	1.0E-01	152727.1	EST-HUMAN	Hom sapiens cyclophilic inhibitor 2 (CIN12), mRNA	
5657	15663	28658	3.73	1.0E-01	7427652	EST-HUMAN	Hom sapiens cyclophilic inhibitor 2 (CIN12), mRNA	
6533	16166	28356	4.19	1.0E-01	AF208970.1	EST-HUMAN	Hom sapiens Kupffer-type zinc finger protein (PEZ3) mRNA, alternative splice form 4	
6533	16166	28357	4.16	1.0E-01	AF208970.1	EST-HUMAN	Hom sapiens Kupffer-type zinc finger protein (PEZ3) mRNA, alternative splice form 4	
6410	16278	29441	6.63	1.0E-01	AV008751	EST-HUMAN	WIF6 (2.1) NCI CCSAP/Gas-6/Homo sapiens cDNA clone IMAGE:3553467	
6410	16278	11630	1.53	1.0E-01	68102727.1	EST-HUMAN	Hom sapiens baylory, mRNA [IMAGE:3553467]	
6544	16042	29581	5.3	1.0E-01	BF330756.1	EST-HUMAN	RCA10313-2287071	
6693	16673	26784	2.65	1.0E-01	BF029174.1	EST-HUMAN	BF029174.1 NIH MGC: 53 Hom sapiens cDNA clone IMAGE:3090837	
7208	17085	27274	1.15	1.0E-01	AA336800.1	EST-HUMAN	2A26P011.1 Scores, unknown uterus NIH3T3 Hom sapiens cDNA clone IMAGE:3090837	
7446	16488	26850	16.52	1.0E-01	AF000996.1	EST-HUMAN	FIR-S4640 Y03460 Y03355.0< protein -> sheet;	
7454	17263	26551	16.52	1.0E-01	AF000996.1	EST-HUMAN	Human mRNAs for pancreatic gamma-gamma-tumourbase	
7623	17474	27148	18.4	1.0E-01	DR845462	EST-HUMAN	Hom sapiens gamma-gamma-tumourbase (GGT), transcript variant 3, mRNA	
7623	17474	27094	5.64	1.0E-01	BS1319897.1	EST-HUMAN	BS1319897.1 NIH MGC: 53 Hom sapiens cDNA clone IMAGE:3079553	
7656	17800	28040	1.76	1.0E-01	114363127	EST-HUMAN	Hom sapiens Janus kinase 2 (AK2), mRNA	
8454	83227	28581	2.88	1.0E-01	S58327.1	EST-HUMAN	transient-exon alpha-1< protein (yolkocyte kinase) (AK2), mRNA	
8610	19198	28596	1.78	1.0E-01	AB202626.1	EST-HUMAN	transient-exon alpha-1< protein (yolkocyte kinase) (AK2), mRNA	
335	10267	20711	3.24	1.0E-01	AV195905.1	EST-HUMAN	Hom sapiens mRNA for KIAA0189 protein, partial cds	
604	10540	20350	0.86	1.0E-02	BIE252470.1	EST-HUMAN	Hom sapiens cholinesterase 21 segment Human cDNA clone IMAGE:33443205	
756	10687	20826	1.46	1.0E-02	4657574	EST-HUMAN	Hom sapiens 5'-nucleotidase (5'-NT), mRNA	
1101	10177	20859	1.95	1.0E-02	W17678.1	EST-HUMAN	Human endogenous retroviral DNA (+)-, complete retroviral segment	
1247	11154	21003	1.39	1.0E-02	11437146	EST-HUMAN	Hom sapiens solute carrier family 2 (facilitated glucose transporter) member 9 (SLC2A9), mRNA	
1247	11154	21003	1.39	1.0E-02	11437146	EST-HUMAN	Hom sapiens solute carrier family 2 (facilitated glucose transporter) member 9 (SLC2A9), mRNA	

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID No.:	Exon Seq ID No.:	ORF Seq ID No.:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
1306	11303	21162	90.24	1.0E-102	BE-40847.1	EST_HUMAN	60128060251 NIH_3T3_21 Homo sapiens cDNA clone IMAGE:3629801 5' similar to smr02c10.1x1 Johnsen frontal cortex Homo sapiens cDNA clone IMAGE:15392954 3' similar to SW-GC96_HUMAN Q08379_GOLIN-665 ;
2281	12145	22044	1.34	1.0E-102	AH24689.1	EST_HUMAN	smr02c10.1 Johnsen frontal cortex Homo sapiens cDNA clone IMAGE:15392954 3' similar to SW-GC96_HUMAN Q08378_GOLIN-665 ;
2281	12145	22045	1.34	1.0E-102	AH24690.1	EST_HUMAN	smr02c10.1 Johnsen frontal cortex Homo sapiens cDNA clone IMAGE:15392954 3' similar to SW-GC96_HUMAN Q08378_GOLIN-665 ;
3026	12854	22747	1.51	1.0E-102	70851978	NT	Human epilians KU00167 gene product (KA016187), mRNA
3084	13021	22815	5.61	1.0E-102	AU141051	EST_HUMAN	AU141056_PLUCE_Homo sapiens cDNA clone PLACE4005650 5'
3084	13021	22816	5.61	1.0E-102	AU141055.1	EST_HUMAN	AU141056_PLUCE_Homo sapiens cDNA clone PLACE4005650 5'
4159	14020	23914	1.46	1.0E-102	AH24691.1	NT	Human epilians chromosome 21 segment 11S12007
4314	14211	23934	2.11	1.0E-102	BB26130.1	EST_HUMAN	601107843F1 NIH_3T3_16 Homo sapiens cDNA clone IMAGE:333832 5'
5063	14633	24705	1.09	1.0E-102	R58468.1	EST_HUMAN	yG2504.1-1 Suores patienta Nb2HP Homo sapiens cDNA clone IMAGE:1406934 5'
5300	15221	25025	1.88	1.0E-102	AH07133.1	NT	Human epilians protein phosphatase- regulatory subunit 7 (PPR7) gene, exon 7
5515	15433	25522	7.27	1.0E-102	AB034951.1	NT	Human epilians HS54 mRNA for heat shock cognate protein 54, complete cds
6558	15453	25523	3.46	1.0E-102	770399	NT	Human epilians histone deacetylase 7 (HDAC7), mRNA
6558	15453	25523	3.46	1.0E-102	770398	NT	Human epilians histone deacetylase 7 (HDAC7), mRNA
6800	16708	25818	2.54	1.0E-102	AU150825.1	EST_HUMAN	Q13137_NDP25 ;
6335	16214	26376	6.50	1.0E-102	AJ238694.1	NT	Human epilians mRNA for Cimbamur-1 antigenic protein 2, troponin
6465	16554	26524	2.53	1.0E-102	AH170738	EST_HUMAN	V774738_Co_Human sapiens cDNA clone IMAGE:1544003 5'
6787	16808	28867	4.2	1.0E-102	BET793081.1	EST_HUMAN	CY247-1025-210800-238-108 NT0028_Homo sapiens cDNA clone IMAGE:39063145 5'
6852	16711	28904	2.53	1.0E-102	B591055.1	EST_HUMAN	Q1610107F1 NIH_3T3_16C_70 Homo sapiens cDNA clone IMAGE:39063145 5'
6945	16823	27014	1.36	1.0E-102	AV594917.1	EST_HUMAN	AVE94817_SKC_Homo sapiens cDNA clone GRICCEEE11 5'
6946	16820	27015	1.36	1.0E-102	AV594917.1	EST_HUMAN	AVE94817_SKC_Homo sapiens cDNA clone GRICCEEE11 5'
7001	16818	27058	4.00	1.0E-102	AB0507923.1	NT	Human epilians mRNA for KA4454 protein, partial cds
7374	17243	27448	1.52	1.0E-102	770393.1	EST_HUMAN	yG13407.1 Suores fetal liver spleen INFUS_Homo sapiens cDNA clone IMAGE:670251 5'
7374	17243	27448	1.52	1.0E-102	770393.1	EST_HUMAN	yG13407.1 Suores fetal liver spleen INFUS_Homo sapiens cDNA clone IMAGE:670251 5'
7415	17245	27450	3.58	1.0E-102	AU124629.1	EST_HUMAN	AU124629_N1-2RMH_Homo sapiens cDNA clone N1-2RMH IMAGE:670250 5'
7061	17841	28082	2.03	1.0E-102	1129450	NT	Human epilians myosin (Myo-16) 21(156D) (Myo162), mRNA
7981	17811	28053	2.03	1.0E-102	11425450	NT	Human epilians myosin (Myo-16) 21(156D) (Myo162), mRNA
7981	17831	28071	2.9	1.0E-102	AH050937.1	EST_HUMAN	RC-BT04-280446-01-BT074_Homo sapiens cDNA clone IMAGE:39063145 5'
7981	17831	28071	2.9	1.0E-102	AH050937.1	EST_HUMAN	RC-BT04-280446-01-BT074_Homo sapiens cDNA clone IMAGE:39063145 5'
8005	17855	28098	2.3	1.0E-102	AAM970768.1	EST_HUMAN	cNTRDA_1_Suores INF_L_T_GBC_S1_Human mRNA CAVEONL_2.1[1];
8421	18265	28549	2.38	1.0E-102	B597488.1	EST_HUMAN	SW-CAV2_HUMAN PB1686 CAVEONL_2.1[1];
							60128060251 NIH_3T3_21 Homo sapiens cDNA clone IMAGE:3924168 5'

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 Table 4
 Single Exon Proteins Expressed in Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8424	18298	28553	1.98	1.0E-102	4507822	NT	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
8424	18298	28554	1.98	1.0E-102	4507822	NT	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
8708	18626	28807	2.78	1.0E-102	BR359243.1	EST_HUMAN	Rho H1 T0072-1506009-011-011-E170072-Homo sapiens cDNA
8847	18755	29054	4.04	1.0E-102	U415022.1	NT	Human chromosome 16 cathele transport (SLC9A6) and (CDM) paralogous genes, complete cds
9054	18837	18837	2.82	1.0E-102	AV300962.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
9051	19183	25247	4.77	1.0E-102	AL163280.2	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
63	10149	18861	0.82	1.0E-103	BE003458.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
63	10246	18862	0.82	1.0E-103	BE003458.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
93	10778	19864	8.1	1.0E-103	DE07078.2	NT	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
201	10173	19999	0.83	1.0E-103	AJ276348.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
9865	10888	20734	1.01	1.0E-103	BE877541.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
1223	11131	20965	7.29	1.0E-103	BE003458.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
1578	11482	21342	2.32	1.0E-103	AF012872.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
1872	11768	21643	1.04	1.0E-103	7057622	NT	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
1832	11827	21708	1.27	1.0E-103	4502428	NT	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
1832	11827	21709	1.27	1.0E-103	4502428	NT	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
2257	12141	22040	1.57	1.0E-103	AL134989.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
2401	12278	22175	2.22	1.0E-103	AF006596.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
2578	12449	22340	0.86	1.0E-103	NC2270.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
3030	12658	23058	2.43	1.0E-103	BE744722.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
3333	13253	23058	3.44	1.0E-103	AV298245.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
3369	13410	23105	1.03	1.0E-103	AB040692.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
3685	13006		2.41	1.0E-103	AF023861.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
3726	13637	23423	1.16	1.0E-103	AA486683.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
3757	13670	23454	1.39	1.0E-103	11439876	NT	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
3922	13831	23911	3.02	1.0E-103	276833.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
5519	15534	25616	1.72	1.0E-103	AF177605.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
5668	15903	28027	5.37	1.0E-103	AF0703460.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA
6033	15638	26080	1.68	1.0E-103	AI560071.1	EST_HUMAN	Human ciliopathy transferase 2 family, polypeptide B11 (UGT2B11) mRNA

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID No.	Exon Seq ID No:	CRF-SEQ ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
0033	16936	26070	1.68	1.0E-103	AJ590071.1	EST_HUMAN	Im5Bq05.1x1 INCL CGAP_Bm25 Homo sapiens cDNA clone [IMAGE:2162289_3] similar to TR-Q13766 Q13769 ANONYMOUS ;
0032	15102	24878	1.68	1.0E-103	50322322 NT	INT_RNA	Homo sapiens dyrophin (muscular dystrophy, Duchenne and Becker types), includes DYS142, DYS164, DYS206, DYS220, DYS226, DYS265, DYS270, DYS272 (CMD), transcript variant Dp427m,
0052	15102	24879	1.68	1.0E-103	50322322 NT	INT_RNA	Homo sapiens dyrophin (muscular dystrophy, Duchenne and Becker types), includes DYS142, DYS164, DYS206, DYS220, DYS226, DYS265, DYS270, DYS272 (CMD), transcript variant Dp427m,
0269	16153	23310	1.54	1.0E-103	AV965774.1	EST_HUMAN	EST37269 IMAGE:residues, MAG_Homo sapiens cDNA
0338	16201	26361	3.21	1.0E-103	BE748159.1	EST_HUMAN	201171 TSSTP1 NIH-MFG-56 Homo sapiens cDNA clone [IMAGE:3838545_5]
0568	16426	28907	3.28	1.0E-103	AJ590071.1	EST_HUMAN	Im5Bq05.1x1 INCL CGAP_Bm25 Homo sapiens cDNA clone [IMAGE:2162289_3] similar to TR-Q13766 Q13769 ANONYMOUS ;
0558	16426	28908	3.28	1.0E-103	AJ590071.1	EST_HUMAN	Im5Bq05.1x1 INCL CGAP_Bm25 Homo sapiens cDNA clone [IMAGE:2162289_3] similar to TR-Q13766 Q13769 ANONYMOUS ;
0523	16702	28906	2.95	1.0E-103	T3/1080.1	EST_HUMAN	EST372703 Human Brain Homo sapiens cDNA 5' end similar to None
7010	16887	27079	1.17	1.0E-103	AU140344.1	EST_HUMAN	AU140344 PLICE_Homo sapiens cDNA clone PLACE2000374_5
7010	16887	27080	1.17	1.0E-103	AU140344.1	EST_HUMAN	AU140344 PLICE_Homo sapiens cDNA clone IMAGE:3525584_3 similar to 7186/03.1x1 Scores NSF FB SW OT PA_P_S1 Homo sapiens cDNA clone IMAGE:3525584_3
7050	16027	27118	1.43	1.0E-103	BF102644.1	EST_HUMAN	SW-PTNF_HUMAN_Q168262 PROTEIN-TYROSINE PHOSPHATASE C1 ;
7267	17444	27337	3.08	1.0E-103	6006521 NT	INT	Homo sapiens Igf1 (secreted domain (PTF-interacting) (TRD)) mRNA
7787	17637	27870	2.02	1.0E-103	237976.1	NT	H. sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
7815	17685	27905	2.09	1.0E-103	AV963076.1	EST_HUMAN	EST3715749 IMAGE:residues, MAG_Homo sapiens cDNA
7878	17728	27972	9.93	1.0E-103	AJ579565.1	EST_HUMAN	ea651fa4/1 Schneider_fetal Brain 2000a_Homo sapiens cDNA clone IMAGE:2518328_5 similar to TR-Q1202084 Q1202084
8115	18004	28250	3.08	1.0E-103	AF1762798.1	EST_HUMAN	PHOSPHOLIPASE C NEIGHBORING ;
8218	18101	28353	2.74	1.0E-103	AF149737.1	NT	Homo sapiens NOD2 protein (NOD2) gene, exons 1, 2, and 3
8219	18101	28354	2.74	1.0E-103	AF149737.1	NT	Homo sapiens NOD2 protein (NOD2) gene, exons 1, 2, and 3
8881	18860	28982	2.56	1.0E-103	AJ382683.1	EST_HUMAN	AU186283 PLICE_Homo sapiens cDNA clone PLACE103923_5
8873	17892	28139	6.49	1.0E-103	L48910.1	NT	Homo sapiens poly(A) ribidylic acid esterase (PARE) gene, exons 27-30
8973	18778	29070	3.42	1.0E-103	BES644911	EST_HUMAN	7d6ba10.1x1 Scores NSF FB SW OT PA_P_S1 Homo sapiens cDNA clone IMAGE:32267610_3 similar to contains MER26.13 MER29 repetitive element ;

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Table 4

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Probe Seq ID No.	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBI233) genes, complete cds							
6049	18633			1.72	1.0E-103	AF224659.1	NT
6079	18805			2.65	1.0E-103	11526291	NT
9279	18979	103	AB011369.1	2.21	1.0E-104	AB011369.3	NT
223	10202	20016		2.6	1.0E-104	AL037540.3	EST_HUMAN
233	10202	20017		2.6	1.0E-104	AL037540.3	EST_HUMAN
1845	11741	21617		1.61	1.0E-104	AF262428	NT
2147	12035	21932		7.18	1.0E-104	AA132976.1	EST_HUMAN
2157	12044	21944		1.91	1.0E-104	BE744628.1	EST_HUMAN
2318	12198	22097		1.15	1.0E-104	EF534221.1	EST_HUMAN
2318	12198	22098		1.15	1.0E-104	EF534221.1	EST_HUMAN
2387	12208	22168		1.55	1.0E-104	EF534221.1	EST_HUMAN
2842	12770	22559		7.64	1.0E-104	AY84671.1	NT
2889	12813			2.82	1.0E-104	Y111151.1	NT
3345	13265			1.54	1.0E-104	AA319456.1	EST_HUMAN
3360	13465	22260		0.98	1.0E-104	AB033102.1	NT
3360	13465	23261		0.95	1.0E-104	AB033102.1	NT
3851	13772	23554		0.91	1.0E-104	AB32996.1	NT
4280	14179	239567		4.28	1.0E-104	AK027861.1	NT
4504	14397	24162		0.9	1.0E-104	AF231920.1	NT
4504	14397	24163		0.9	1.0E-104	AF231920.1	NT
5617	15632	28615		1.33	1.0E-104	U45379.1	NT
5617	15632	28616		1.33	1.0E-104	U45379.1	NT
5891	15797	28919		8.46	1.0E-104	AT788797.1	EST_HUMAN
5891	15797	28920		8.46	1.0E-104	AT788797.1	EST_HUMAN
6073	16056	28204		1.52	1.0E-104	BE314182.1	EST_HUMAN
6293	16152	28205		2.38	1.0E-104	BE44220.1	EST_HUMAN
7288	17164	27303		2.24	1.0E-104	BE44220.1	EST_HUMAN
7370	17239	27442		4.66	1.0E-104	AF091386.1	NT
7370	17239	27443		4.66	1.0E-104	AF091386.1	NT

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID NC:	Exon Seq ID NC:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit HRI Descriptor
7450	16443	265530	3.84	1.0E-104	BF328441.1	EST HUMAN	IL3-HT0819-008000-248-F07 HT0019 Homo sapiens cDNA
7450	16443	265531	3.84	1.0E-104	BF328441.1	EST HUMAN	IL3-HT0819-008000-248-F07 HT0019 Homo sapiens cDNA
7809	17659	27898	3.14	1.0E-104	BF797193.1	EST HUMAN	60158150371 NIH MGC_7 Homo sapiens cDNA clone IMAGE:36559775
7809	17659	27899	3.14	1.0E-104	BF797193.1	EST HUMAN	60158150371 NIH MGC_7 Homo sapiens cDNA clone IMAGE:36559775
7947	17877	280537	1.42	1.0E-104	AV786707.1	EST HUMAN	AV786707 HT1 Homo sapiens cDNA clone HT1 CSY175
7986	17816	280537	4.51	1.0E-104	AV130795.1	EST HUMAN	AV130795 HT2P Homo sapiens cDNA clone HT2P30015986
8014	17864	28110	4.24	1.0E-104	U68635.5	EST HUMAN	Human beta-1-milrinone gene, exon 19, 20, 21, 22, 23, 24, 25
8017	18494	28755	1.84	1.0E-104	BF720191.1	EST HUMAN	BF720191 HT0019 Homo sapiens cDNA
8017	18494	28756	1.84	1.0E-104	BF720191.1	EST HUMAN	BF720191 HT0019 Homo sapiens cDNA
8841	18905	28783	4.49	1.0E-104	BF188288.1	EST HUMAN	6021412151-1 NIH MGC_48 Homo sapiens cDNA clone IMAGE:36559765
9842	19340	277	1.37	1.0E-104	BF393982.1	EST HUMAN	601312181 F1 NIH MGC_44 Homo sapiens cDNA clone IMAGE:36559765
419	9895	19777	16.85	1.0E-105	45621685	NT	Homo sapiens amyloid beta (A4) precursor protein (precursor membrane), Alzheimer disease (APP), mRNA
579	10577	20323	3.22	1.0E-105	AF328987.1	NT	Homo sapiens Not I (muco) homolog (ME15), mRNA, complete cds
579	10577	20324	3.22	1.0E-105	AF328987.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
1771	11767	21553	1.16	1.0E-105	AL162290.2	NT	Homo sapiens chromosome 21 segment HS21C080
1894	11760	21655	1.75	1.0E-105	DE0918.1	NT	Homo sapiens mRNA for KIAA0126 gene, partial cds
2142	12350	21928	1.84	1.0E-105	AA518399.1	EST HUMAN	EST700858 Sheet1 Homo sapiens cDNA clone similar to autoimmune antigen Ku, 370kDa subunit
2889	12854	2.57	0.87	1.0E-105	AA584808.1	EST HUMAN	prot0165_51 INCL CG49_P1 Homo sapiens cDNA clone IMAGE:11002505_3
2975	12902	2.57	0.87	1.0E-105	AJ220041.1	EST HUMAN	Homo sapiens D65 rib confg between AM-1 and CBR1 on chromosome 21q22; segment 13
3307	13228	28032	0.93	1.0E-105	7045422	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
3307	13228	28033	0.93	1.0E-105	7045422	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
3592	13500	1.26	1.0E-105	11425352	NT	Homo sapiens dematinophilin (OP-1), mRNA	
4008	13914	23689	2.15	1.0E-105	AW961985.1	EST HUMAN	EST73761 MAGE genes
4638	14226	24513	0.84	1.0E-105	DE858889.1	EST HUMAN	6014486252 F1 NIH MGC_65 Homo sapiens cDNA clone IMAGE:36559166
4638	14226	24514	0.84	1.0E-105	DE858889.1	EST HUMAN	6014486252 F1 NIH MGC_65 Homo sapiens cDNA clone IMAGE:36559166
4845	14735	3.74	1.0E-105	AL162298.2	NT	Homo sapiens chromosome 21 segment HS21C08	
5044	14916	24550	0.93	1.0E-105	AB018393.1	NT	Homo sapiens mRNA for KIAA0706 protein, partial cds
5095	14896	24740	2.23	1.0E-105	AB20073.1	NT	Homo sapiens mRNA for KIAA0866 protein, complete cds
5161	14910	24840	1.3	1.0E-105	AB018399.1	NT	Homo sapiens mRNA for KIAA0796 protein, partial cds
6167	15124	24840	3.08	1.0E-105	114191985	NT	Homo sapiens GTPases activating protein-like (GAPL), mRNA
6167	15124	24841	3.08	1.0E-105	114191985	NT	Homo sapiens GTPases activating protein-like (GAPL), mRNA
6678	16559	26754	6.43	1.0E-105	T05087.1	EST HUMAN	EST70975 T-cell brain, Stratagene (cat#80265) Homo sapiens cDNA clone HIFCR2

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID No.	Exon SEQ ID NC:	ORF SEQ ID NC:	Expression Signal Value	Most Similar BLAST Hit Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6984	16773	279367	1.8	1.0E-105	AV/007194.1	EST_HUMAN	w50c10.1N1 CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2500826 3' similar to SW-ACSA_PENCH_P81533_ACETYL-COENZYME A SYNTHETASE ;
7234	17111	273041	2.99	1.0E-105	UJ-HB06-pab1b-1N1 CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2711782 3'	EST_HUMAN	UJ-HB06-pab1b-1N1 Homo sapiens SMARCA4 gene, complete cds, alternative splicing
8303	18181	284261	5.44	1.0E-105	AF254822.1	NT	Homo sapiens COL4A5 gene for (ex17) collagen, exon 31
8550	18430	286559	1.8	1.0E-105	D83548.1	NT	Homo sapiens Ran binding protein 11 (LRRK11) mRNA
8602	18459	287401	2.06	1.0E-105	NM_007407.1	Swine, Sus scrofa, NrfH/Htrt Homologous cDNA clone IMAGE:2835391 3' similar to TRP817862	NM_007407.1 Sus scrofa, NrfH/Htrt Homologous cDNA clone IMAGE:2835391 3' similar to TRP817862
8867	18679	286668	2.01	1.0E-105	AV/027584.1	EST_HUMAN	F97862 PROTEASE :
145	10119	10119	0.95	1.0E-105	AV/03298.1	EST_HUMAN	UJ-HB06-pab1b-1N1 CGAP_Bm25 Homo sapiens cDNA clone IMAGE:032984 5'
198	10170	19867	1.54	1.0E-105	AV/08905.1	EST_HUMAN	UJ-HB06-pab1b-1N1 CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2215008 3'
631	10473	202869	1.77	1.0E-105	AV/088566.1	EST_HUMAN	ES1377620 MAGO neuregulins, MAGO Homo sapiens cDNA
889	10527	203344	0.79	1.0E-105	J00146.1	NT	Human dihydrofolate reductase pseudogene [pal-1d1]
1500	10522	203344	1.21	1.0E-105	J00146.1	NT	Human dihydrofolate reductase pseudogene [pal-1d1]
1506	11413	212122	2.66	1.0E-105	JF14737.1	NT	Homo sapiens soluble epoxide hydrolase [CYP450] precursor-mRNA, secreted partial cds
1674	11575	21444	4.51	1.0E-105	U8724.1	NT	Homo sapiens growth factor receptor [GFR] precursor-mRNA, secreted partial cds
1762	11681	216533	5.12	1.0E-105	AA/B227446.1	EST_HUMAN	LTR3 repetitive element ;
1762	11681	21654	5.12	1.0E-106	AA/S27446.1	EST_HUMAN	UJ-HB06-pab1b-1N1 CGAP_C63 Homo sapiens cDNA clone IMAGE:337362 3' similar to contains element
2075	11685	21658	1.08	1.0E-106	BE/142986.1	EST_HUMAN	LTR3 repetitive element ;
2286	12153	220202	6.39	1.0E-106	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2485	12333	222206	1.63	1.0E-106	AF00528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDAF), exon 2 and flanking repeat regions
2557	12429	22322	1.25	1.0E-106	U8/676.2	NT	Homo sapiens membrane protein B33 mRNA, complete cds
2559	12481	22324	1.94	1.0E-106	BE/260201.1	EST_HUMAN	0011497538-1 N1_L10C_19 Homo sapiens cDNA clone IMAGE:3302461 5'
2729	12891	22487	4.23	1.0E-106	AI/705283.1	EST_HUMAN	q77610x3 Sus scrofa mRNA clone IMAGE:18788307 3'
2795	13119	21183	2.97	1.0E-106	4804194	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2795	13119	21184	2.97	1.0E-106	4804194	NT	Homo sapiens mRNA for KIAA3205 protein, partial cds
2914	12837	22655	5.01	1.0E-106	AB/037747.1	NT	Homo sapiens mRNA for KIAA3205 protein, partial cds
2311	12357	22656	6.01	1.0E-106	AB/037747.1	NT	Homo sapiens mRNA for KIAA3206 protein, partial cds
3143	13068	228697	2.36	1.0E-106	88/22905	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3328	13248	23053	0.8	1.0E-106	AB/008861.1	NT	Homo sapiens gene for acetyl receptor type II, complete cds
3394	13311	23109	0.58	1.0E-106	AB/035104.1	NT	Homo sapiens mRNA for KIAA2770 protein, partial cds

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Table 4

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3394	13311	23110	0.98	1.0E-106	ABCD3104.1	NT	Homo sapiens mRNA for KIAA278 protein, partial cds EST368675 IMAGE:99744956.1
3952	13860	23954	7.22	1.0E-106	AIV9744956.1	EST_HUMAN	Homo sapiens cDNA EST368675 IMAGE:99744956.1
3952	13860	23955	7.22	1.0E-106	AIV9744956.1	EST_HUMAN	Homo sapiens cDNA EST368675 IMAGE:99744956.1
4457	14391	24176	1.21	1.0E-106	BE1442986.1	EST_HUMAN	MRA-TD105_1402008-010_H70f65 Homo sapiens cDNA MRA-TD105_1402008-010_H70f65 Homo sapiens cDNA
5153	15047	1.21	1.0E-106	LA1944.1	NT	Homo sapiens dytectorin gene, exon 41 e4j2009.61 Sacreus testis, NHT Homo sapiens cDNA clone s301225 3' similar to gb:X12433 PROTEIN	
5248	15219	26022	2.98	1.0E-106	AA781155.1	EST_HUMAN	PHIPS-2 (HUMAN) PHIPS-2 (HUMAN)
6711	15619	25722	0.78	1.0E-106	BF76974.1	EST_HUMAN	601105736EF_NIH_MCC_15 Homo sapiens cDNA clone IMAGE:20834345.5
5900	15722	26954	16.4	1.0E-106	BF76974.1	EST_HUMAN	Homo sapiens Xk505 graninase II (X2), mRNA gb:672607.51 Stratagene sechito brain S11 Homo sapiens cDNA clone IMAGE:9869732 3' similar to gb:X052873
6595	15772	25862	16.4	1.0E-106	115456913	NT	Homo sapiens Xk505 graninase II (X2), mRNA gb:672607.51 Stratagene sechito brain S11 Homo sapiens cDNA clone IMAGE:9869732 3' similar to gb:X052873
6381	16224	26385	5.59	1.0E-106	AA663778.1	EST_HUMAN	KINEIN HEAVY CHAIN (HUMAN); Homo sapiens XPMC2 protein (LOC57109), mRNA
6390	16252	28412	4.83	1.0E-106	11426217	NT	Homo sapiens XPMC2 protein (LOC57109), mRNA
6431	16292	26453	1.35	1.0E-106	BE202722.1	EST_HUMAN	601105736EF_NIH_MCC_15 Homo sapiens cDNA clone IMAGE:20834345.5
6490	16446	26517	7.6	1.0E-106	11426503	NT	Homo sapiens sorting nexin 11 (SNX11), mRNA Homo sapiens sorting nexin 11 (SNX11), mRNA
6490	16548	26518	7.6	1.0E-106	11426503	NT	601105731F_NIH_MCC_9 Homo sapiens cDNA clone IMAGE:3648463.5
6657	16537	26733	5.33	1.0E-106	BE721408.1	EST_HUMAN	601105731F_NIH_MCC_9 Homo sapiens cDNA clone IMAGE:3648463.5
6657	16537	26734	5.33	1.0E-106	BE721408.1	EST_HUMAN	601105731F_NIH_MCC_9 Homo sapiens cDNA clone IMAGE:3648463.5
6754	16633	26821	-	1.48	1.0E-106	AI622006.1	EST_HUMAN
7052	16929	27120	3.16	1.0E-106	AI654123.1	EST_HUMAN	601105731F_NIH_MCC_9 Homo sapiens cDNA clone IMAGE:3648463.5
7281	17158	27353	1.86	1.0E-106	AA828507.1	EST_HUMAN	601105731F_NIH_MCC_9 Homo sapiens cDNA clone IMAGE:3648463.5
7291	17159	27354	1.86	1.0E-106	AA828507.1	EST_HUMAN	601105731F_NIH_MCC_9 Homo sapiens cDNA clone IMAGE:3648463.5
7351	17219	27419	2.76	1.0E-106	AI750447.1	EST_HUMAN	601105731F_NIH_MCC_9 Homo sapiens cDNA clone IMAGE:3648463.5
7424	17291	27501	1.86	1.0E-106	AI76569.1	EST_HUMAN	601105731F_NIH_MCC_9 Homo sapiens cDNA clone IMAGE:3648463.5
7424	17291	27502	1.86	1.0E-106	AI76569.1	EST_HUMAN	601105731F_NIH_MCC_9 Homo sapiens cDNA clone IMAGE:3648463.5
7803	17653	27850	1.32	1.0E-106	BF027310.1	EST_HUMAN	601105731F_NIH_MCC_20 Homo sapiens cDNA clone IMAGE:3648463.5
7803	17653	27851	1.32	1.0E-106	BF027310.1	EST_HUMAN	601105731F_NIH_MCC_20 Homo sapiens cDNA clone IMAGE:3648463.5
7850	17730	27975	5.83	1.0E-106	AA604417.1	EST_HUMAN	601105731F_NIH_MCC_9 Homo sapiens cDNA clone IMAGE:130395.3
7850	17730	27976	5.83	1.0E-106	AA604417.1	EST_HUMAN	601105731F_NIH_MCC_9 Homo sapiens cDNA clone IMAGE:130395.3

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Table 4
Single Exon Profiles Expressed in Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7801	17751	27950	1.86	1.0E-166	AV363269.1	EST_HUMAN	RBC-C70318-201198-031-#11 CT0519 Homo sapiens cDNA
8019	17859	28113	3.06	1.0E-202	AL165202.2	NT	Homo sapiens chromosome 21 segment HS21C002
8239	18149	28360	5.21	1.0E-106	BR020755.1	EST_HUMAN	6014534615f NIH_MCG_65 Homo sapiens cDNA clone IMAGE:3857366 5
8239	18149	28350	5.21	1.0E-106	BR020755.1	EST_HUMAN	6014534615f NIH_MCG_65 Homo sapiens cDNA clone IMAGE:3857366 6
8415	18259	28544	2.28	1.0E-106	JG6290.1	NT	Human synapsin receptor mRNA, complete cds
8415	18259	28545	2.28	1.0E-106	JG6290.1	NT	Human synapsin receptor mRNA, complete cds
9122	19540	28546	1.87	1.0E-106	AV1410405.1	EST_HUMAN	fnd05h11.X NIH_MCG_17 Homo sapiens cDNA clone IMAGE:3801644 5
9342	19222	25298	2.31	1.0E-106	BEB864488.1	EST_HUMAN	60145303615f NIH_MCG_72 Homo sapiens cDNA clone IMAGE:3918524 5
9554	19152	25299	2.31	1.0E-106	EE564488.1	EST_HUMAN	60145303615f NIH_MCG_72 Homo sapiens cDNA clone IMAGE:3918524 6
9554	19152	25300	5.35	1.0E-106	EE564488.1	EST_HUMAN	TC-T< T0246_B00800024-B05 C10249 Homo sapiens cDNA
234	10233	-	-	3.48	1.0E-107	AAJ27775.1	NT
2641	10229	-	-	1.05	1.0E-107	XO_pseudoacromial_region; segment 1/2	Human IFNAR gene for interferon alpha/beta receptor
606	10542	20361	1.07	1.0E-107	4B29853	NT	Homo sapiens neuronal cell adhesion molecule (NCAM) mRNA
614	10750	20361	1.7	1.0E-107	AF165103.1	NT	Homo sapiens NY-REN-23 antigen mRNA, partial cds
798	10750	20565	0.86	1.0E-107	X00469.1	NT	Human IFNAR gene for interferon alpha/beta receptor
868	10764	20544	1.16	1.0E-107	X00469.1	NT	Human IFNAR gene for interferon alpha/beta receptor
963	10877	20724	10.67	1.0E-107	AF164121.1	NT	Homo sapiens sodium-dependent high-affinity divalent cation transporter (NaDC9) mRNA, complete cds
1287	11164	21015	0.78	1.0E-107	AB032253.1	NT	Homo sapiens AB032253 mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
1561	11456	21314	2.13	1.0E-107	BR987405.1	EST_HUMAN	QY24-T05d-20906358-045 HT0460 Homo sapiens cDNA
1718	11619	21488	1.47	1.0E-107	AF136275.1	NT	Homo sapiens calmodulin 2 precursor (C17orf2) gene, exon 3
1707	11605	21571	0.95	1.0E-107	AB907922.2	NT	Homo sapiens mRNA for KIAA0463 (calmodulin, partial cds)
1787	11693	21972	0.95	1.0E-107	AB007922.2	NT	Homo sapiens mRNA for KIAA0463 protein, partial cds
2161	12048	21949	1.26	1.0E-107	U13728.1	NT	Human dipeptidyl peptidase IV (CD26) gene, exon 20
2487	12162	22267	0.86	1.0E-107	BE732460.1	EST_HUMAN	601567619f1 NIH_MCG_21 Homo sapiens cDNA clone IMAGE:3842309 5
2487	12162	22268	0.86	1.0E-107	BE732460.1	EST_HUMAN	601567619f1 NIH_MCG_21 Homo sapiens cDNA clone IMAGE:3842309 5
25076	12003	22701	1.94	1.0E-107	AV842451.1	EST_HUMAN	PMI-CN0031-190101-001-003 CN00311 Homo sapiens cDNA
25076	12003	22702	1.94	1.0E-107	AV842451.1	EST_HUMAN	PMI-CN0031-190101-001-003 CN00311 Homo sapiens cDNA
3097	12985	22779	2.62	5.0E-107	BB602007	NT	Homo sapiens SRY (suppressor of male germ) homolog 2 (SRY3SH2), mRNA
3754	13067	23450	3.92	1.0E-107	AF020071.1	EST_HUMAN	60144258f1 NIH_MCG_65 Homo sapiens cDNA clone IMAGE:3846464 5
5575	15490	25657	3.28	1.0E-107	BE867489.1	EST_HUMAN	U-HIF-3NC-elf-c08-U11 NIH_MCG_56 Homo sapiens cDNA clone IMAGE:3019310 5'
6336	16219	26380	1.62	1.0E-107	AV563913.1	EST_HUMAN	U-HIF-BNC-elf-c08-U11 NIH_MCG_56 Homo sapiens cDNA clone IMAGE:3019310 5'
6336	16219	26381	1.52	1.0E-107	AV563913.1	EST_HUMAN	white04-X1 NC_ CGAP_Kid1 Homo sapiens cDNA clone IMAGE:3854791 3'
6445	16506	29471	1.63	1.0E-107	AI768078.1	EST_HUMAN	white04-X1 NC_ CGAP_Kid1 Homo sapiens cDNA clone IMAGE:3854791 3'

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8057	17078	28128	2.73	1.0E-107	AIRSC2850.1	EST_HUMAN	lrig10.6.x1 NCI CGAP CLL1 Homo sapiens cDNA clone IMAGE:2108353 3' similar to SW:AACT_DICD1
8310	18133	28443	1.92	1.0E-107	L97141.1	NT	PO5005 ALPHA ACTININ 3, NON MUSCULAR.
8327	18204	28445	1.98	1.0E-107	Bf59861.1	EST_HUMAN	SO21295871 NIH MGCC_10 Homo sapiens cDNA clone IMAGE:2251039 5'
8638	18503	28779	9.12	1.0E-107	Bf540590.1	EST_HUMAN	90105668181 NIH MGCC_10 Homo sapiens cDNA clone IMAGE:2452829 5'
6597	17851	28122	4.21	1.0E-107	11447901.0	INT	Home sapiens HSPC049 protein (HSPC049). mRNA
6597	17851	28123	4.21	1.0E-107	11447901.0	INT	Home sapiens HSPC049 protein (HSPC049). mRNA
9167	18973		3.94	1.0E-107	AAD014151.1	EST_HUMAN	2aa5601.1 Sarcosine reductase mRNA clone IMAGE:3619443 similar to THR11
639	10854	20711	1.45	1.0E-108	BB2986042.1	EST_HUMAN	lthr1 repetitive element.
1244	11151	20399	1.55	1.0E-108	YI860001.1	NT	lthr17071BF1 NIH MGCC_17 Homo sapiens cDNA clone IMAGE:3582348 8'
2286	12166	22083	7.41	1.0E-108	AIB60040.1	EST_HUMAN	lthr10.1 NCI CGAP P2B8 Homo sapiens cDNA clone IMAGE:2248638 3' similar to gpmM4219 BONE
2282	12166	22064	7.41	1.0E-108	AIB60040.1	EST_HUMAN	PROTEOLYCAN II PRECURSOR (HUMAN); PROTEOLYCAN II PRECURSOR (HUMAN); PROTEOLYCAN II PRECURSOR (HUMAN);
2278	12228	22150	7.2	1.0E-108	BB2986049.1	EST_HUMAN	lthr10.1x1 NCI CGAP P2B8 Homo sapiens cDNA clone IMAGE:2953569 3' similar to pbX37777 60S
3305	13228	23020	0.94	1.0E-108	AF032897.1	NT	RIBOSOMAL PROTEIN L23 (HUMAN); pbJ02727 Mouse ribokinase mRNA, complete cds (MOUSE);
3306	13226	23029	0.84	1.0E-108	AF032897.1	NT	Home sapiens potassium channel subunit (HERG-3) mRNA, complete cds
3742	13654	23457	0.92	1.0E-108	54538365.0	NT	Home sapiens pentenitolular material 1 (POMT1) mRNA
4085	13987	23744	1.33	1.0E-108	AIW94498.1	EST_HUMAN	lthr11.1 NCI CGAP GII Homo sapiens cDNA clone IMAGE:2912001 3' similar to SW:3BP1_MOUSE
4425	14320	24103	1.99	1.0E-108	U72951.1	NT	Peb104 SH3-BINDING PROTEIN 3BP-1.
4425	14320	24107	1.99	1.0E-108	U72951.1	NT	Human histone acetyltransferase nuclear factor 4-alpha gene, exon 2
4425	14320	24373	2.66	1.0E-108	7681678.0	NT	Human sapiens PSN1 gene, alternative transcript
4898	14748	24626	2.19	1.0E-108	AJ038005.1	NT	Home sapiens PSLN gene, alternative transcript
6395	16286	25249	1.53	1.0E-108	AV184664.1	EST_HUMAN	lthr1-H10372-241190-021-240-H10372-Homo sapiens cDNA R02-H10372-241190-021-240-H10372-Homo sapiens cDNA
6395	16312	25163	2.77	1.0E-108	BE8600161.1	EST_HUMAN	650144162224 NIH MGCC_65 Homo sapiens cDNA clone IMAGE:3846893 5'
6395	16312	25167	2.77	1.0E-108	BE8600161.1	EST_HUMAN	650144162221 NIH MGCC_65 Homo sapiens cDNA clone IMAGE:3846893 8'
5732	15640	25745	5.06	1.0E-108	AF284717.1	NT	Home sapiens FVVE domain-containing dual specificity protein phosphatase FVVE-DSF2 mRNA, complete cds
6732	15640	25743	5.06	1.0E-108	AF284717.1	NT	Home sapiens FVVE domain-containing dual specificity protein phosphatase FVVE-DSF2 mRNA, complete cds

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Probe	Exon Seq ID No:	ORF Seq ID No:	Expression Signal Value	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
							Top Hit Accession No.	Top Hit Database Source
5786	15055	28901	1.37	1.0E-108	AJ352986.1	NT	Homo sapiens cavin-1/2 locus, Omcmt1, DTSB22 genes CAV2 (exons 1, 2a, and 2b), CAV1 (exons 1 and 2)	
6247	16113	28265	5.35	1.0E-108	11431887 NT	Homo sapiens G protein-coupled receptor, family C, group 5, member B (GPRC8B), mRNA		
63686	18280	28421	3.34	1.0E-108	4755833 NT	Homo sapiens delta-tetra desaturase (DTSB22) mRNA		
63686	19578	1053	1.05	1.0E-108	A053500.1	NT	Homo sapiens connexin 36 gene (factor 36) mRNA precursor mRNA complete cds	
82022	150566	24881	2.77	1.0E-108	Y12490 NT	NT	Homo sapiens mRNA for Gdp-1-associated microtubule-binding protein (GMAP-210)	
88935	18461	28731	4.26	1.0E-108	AV065685.1	EST_HUMAN	EST-DTSB22 Mage-like transcripts, MAGE-like genes in cDNA	
88935	18555	2.03	1.0E-108	11447445 NT	Homo sapiens G protein-coupled receptor 48 (GPR48), mRNA			
8706	12196	22063	4.14	1.0E-108	A186040.1	IMAGE:2248938 3' similar to gbm14219 BONE PROTEOLYCAN II PRECURSOR (HUMAN);		
8706	12196	22054	4.14	1.0E-108	A186040.1	EST_HUMAN	PROTEOLYCAN II PRECURSOR (HUMAN);	
9357	18030	25303	2.70	1.0E-108	AK024447.1	NT	Homo sapiens mRNA for FL000077 protein, partial cds	
9739	16270	556	1.05	1.0E-108	BT003595.1	EST_HUMAN	Homolog mRNA for KIA0220 gene, partial cds	
10044	10044	19896	0.9	1.0E-108	DIS9749.1	NT	Human mRNA for KIA0220 gene, partial cds	
212	10183	19897	0.92	1.0E-109	J11316 (RJ1316), mRNA			
222	10122	20003	1.91	1.0E-109	11438246 NT	Homo sapiens reticulocalbin 1, Erb-1 hand calcium binding domain (RCN1), mRNA		
458	10433	20219	3.84	1.0E-109	50577112 NT	Homo sapiens telomeric repeat reverse transcriptase (TTRC2) mRNA		
583	10521	20238	14.4	1.0E-109	B0223216.1	NT	Homo sapiens mRNA for KIAA0369 protein, partial cds	
685	10521	20239	14.34	1.0E-109	B0223216.1	NT	Homo sapiens mRNA for KIAA0369 protein, partial cds	
1185	11095	20341	9.63	1.0E-109	K26996.1	NT	Homo sapiens nucleolar phosphoprotein 223 (NPM1) mRNA, complete cds	
1185	11095	20341	4.88	1.0E-109	K26996.1	NT	Homo sapiens nucleolar phosphoprotein 223 (NPM1) mRNA, complete cds	
1831	11728	21802	1.48	1.0E-109	A13643.2	NT	Homo sapiens mRNA for KIAA0016 protein, partial cds	
1831	12031	21805	2.03	1.0E-109	A13642.2	NT	Homo sapiens dihydroorotate dehydrogenase 21 (HOD21), mRNA	
2204	12031	21863	1.97	1.0E-109	Y112423.1	NT	Homo sapiens SH2EIN1 gene, exon 8	
2581	12452	22244	3.88	1.0E-109	A022228.1	EST_HUMAN	TR020197_O02197_CIRCULATING CATHOCID ANTIGEN; TR020197_O02197_CIRCULATING CATHOCID ANTIGEN;	
2581	12452	22245	3.88	1.0E-109	A022228.1	EST_HUMAN	TR020197_O02197_CIRCULATING CATHOCID ANTIGEN;	
2582	12453	22246	2.75	1.0E-109	A022229.1	EST_HUMAN	TR020197_O02197_CIRCULATING CATHOCID ANTIGEN;	
3020	12948	22740	1.98	1.0E-109	Y85190.1	EST_HUMAN	I29161 Human fetal heart Lambda ZAP-Express Homo sapiens cDNA clone :JZ2165 5' similar to ZINC FINGER PROTEIN 7H-145	
3342	12322	23058	1.45	1.0E-109	AW683122.1	EST_HUMAN	CMA-N00009-1804040-150-150 N00009 Homo sapiens cDNA	
3342	12322	23069	1.45	1.0E-109	AW683122.1	EST_HUMAN	CMA-N00009-1804040-150-150 N00009 Homo sapiens cDNA	

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3474	13390	23195	1.2	1.0E-106	AE200598.1	NT	Human sapiens refined dehydrogenase homolog isoform-1 (RDH1) mRNA, complete cds; MRD-HT209-1110400-108-aa-HT2026 Homo sapiens cDNA
3787	13860		1.53	1.0E-109	BF146144.1	EST_HUMAN	Human sapiens mRNA for KIAA0659 protein, partial cds
3911	13821	23901	1.54	1.0E-109	AJ0511181.2	NT	Human sapiens mRNA for KIAA0659 protein, partial cds
3911	13821	23602	1.54	1.0E-109	AJ0511181.2	NT	Isabed6.0x1 NOG_CGAP_G00 Homo sapiens cDNA clone IMAGE-2259390 3 similar to WI-F53A2.8
4034	13866	23732	3.67	1.0E-109	AU055417.1	EST_HUMAN	CE161001; mGAP2c12s1 NCI CGAP_P122 Homo sapiens cDNA clone IMAGE-1216282 3' similar to SW-G172_HUMAN
4070	13972	23749	1.02	1.0E-109	AAB602274.1	EST_HUMAN	P30712 GLUTATHIONE S-TRANSFERASE TAU 2;
4070	13972	23750	1.02	1.0E-109	AAB602274.1	EST_HUMAN	mGAP2c12s1 NCI CGAP_P122 Homo sapiens cDNA clone IMAGE-1216282 3' similar to SW-G172_HUMAN
4070	13972	23965	2.25	1.0E-109	AE002606.1	EST_HUMAN	P30712 GLUTATHIONE S-TRANSFERASE TAU 2;
4324	14202	24176	1.19	1.0E-109	7682093.1	NT	Home sapiens glutamyl cyclase product (TAU1) [GUDCAT] mRNA
4496	14390	24503	1.04	1.0E-109	BF154051.1	EST_HUMAN	Home sapiens KIAA0377 mRNA
4839	14720	24653	0.86	1.0E-109	BF2303673.1	EST_HUMAN	Scarecetin brain (NB) Homo sapiens cDNA clone IMAGE-530397 5'
4934	14856	24658	0.86	1.0E-109	BF2303673.1	EST_HUMAN	Scarecetin brain (NB) Homo sapiens cDNA clone IMAGE-530396 5'
4934	14859	24627	0.86	1.0E-109	BF2303673.1	EST_HUMAN	Scarecetin brain (NB) Homo sapiens cDNA clone IMAGE-269956 5'
5234	15174	24850	2.31	1.0E-109	BF146222.1	EST_HUMAN	Human placental protein 11 (earliest proteinase) (P11) mRNA
6524	15374	26461	1.48	1.0E-109	BF1703561.1	EST_HUMAN	RCF-L-T0615-200400-022-004 HT0615 (Homo sapiens) cDNA
6445	16325	26462	3.66	1.0E-109	BF146224.1	EST_HUMAN	Home sapiens AT-Binding transcription factor 1 (ATBF1), mRNA
6446	16236	26462	5.01	1.0E-109	BF1627071.1	EST_HUMAN	Scarecetin brain (NB) Homo sapiens cDNA clone IMAGE-4020270 5'
6446	16236	26463	5.01	1.0E-109	BF1627071.1	EST_HUMAN	Scarecetin brain (NB) Homo sapiens cDNA clone IMAGE-4020270 5'
6733	16832	26820	1.36	1.0E-109	AL094784.1	NT	Novel human gene mapping to chromosome 13
68320	16969	26982	1.23	1.0E-109	AL094784.1	EST_HUMAN	PM0-310340-009-002-005 BT0540 (Homo sapiens) cDNA
7030	16907		1.72	1.0E-109	AJ077598.1	EST_HUMAN	7618H01 Chromosome 7 fetal brain cDNA library clone 7618H01
7071	16648	27139	5.71	1.0E-109	BF2707540.1	EST_HUMAN	60-0749477F1 NIH-MGC_69 Homo sapiens cDNA clone IMAGE-3892124 5'
7071	16948	27140	5.71	1.0E-109	BF2707540.1	EST_HUMAN	60-0749477F1 NIH-MGC_68 Homo sapiens cDNA clone IMAGE-3892124 5'
7326	17202	27402	2	1.0E-109	HB4860.1	EST_HUMAN	AS4461 BUTMEND-SENSITIVE NA-K COTRANSPORTER - SPN1'; HSC1E12 humanized infant brain cDNA clone c-1c1c12
8165	18043	28294	2.93	1.0E-109	BF1540509.1	EST_HUMAN	60-08503050F1 NIH-MGC_10 Homo sapiens cDNA clone IMAGE-3416959 5'
8155	18043	28295	2.93	1.0E-109	BF1540509.1	EST_HUMAN	60-08503050F1 NIH-MGC_10 Homo sapiens cDNA clone IMAGE-3416959 5'
8183	18059	28318	14.2	1.0E-109	BF15404831.1	EST_HUMAN	60-02007242F1 NIH-MGC_81 Homo sapiens cDNA clone IMAGE-3426341 5'
8335	18212	28464	2.12	1.0E-109		NT	Home sapiens KIAA0744 gene product; histone deacetylase 7 (KIAA0744), mRNA
8348	18212	28465	2.12	1.0E-109		NT	Home sapiens KIAA0744 gene product; histone deacetylase 7 (KIAA0744), mRNA
8448	18341	28606	1.98	1.0E-109	AU1512071	EST_HUMAN	AU1512071 (Homo sapiens) cDNA clone HEIMB1020980 5'

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8676 18564	28848		2.19	1.0E-109	49262838 NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1) mRNA	
8710 18627	28910		4.89	1.0E-109	NT	PIR-S3690_SacI-pd-Beta stress-activated protein kinase-1;rat	2.1 Scores: 117123.1
9269 12091	21993		1.65	1.0E-109	AB011399.1	Homo sapiens Sh3glb1 mRNA	gene, exon 6
9594 19176	28275		2.8	1.0E-109	NT	Homo sapiens gene for Ar-4, complete cds	
3 9890 19781			1.48	1.0E-110	7548804 NT	Homo sapiens transcript variant 2, mRNA	
34 10021 19817			1.0E-110	5603073 NT	Homo sapiens leucine zipper-like transcriptional regulator, 1 (LZR1), mRNA		
34 10021 19818			3.88	1.0E-110	5603073 NT	Homo sapiens leucine zipper-like transcriptional regulator, 1 (LZR1), mRNA	
76 10059 19876	30.63	1.0E-110	CD4498.1	EST_HUMAN	Homo sapiens CD44 antigen, clone 3H4-C447		
104 9690 19781			1.97	1.0E-110	7548904 NT	Homo sapiens diodesin, isoform 1;rat	
201 12265 20276	0.91	1.0E-110	087291.1	EST_HUMAN	Homo sapiens transcript variant 2, mRNA		
516 10468 20269	1.19	1.0E-110	084550.1	EST_HUMAN	Homo sapiens diodesin, isoform 1;rat		
1168 11078 202921	1.09	1.0E-110	5031220 NT	EST_HUMAN	Homo sapiens inward rectifier potassium channel, complete cds		
1268 11166 21016	1.01	1.0E-110	AB032283.1	EST_HUMAN	Homo sapiens BA21B1 mRNA, for bromodomain acid-like 1B, complete cds		
1879 11776 21650	1.5	1.0E-110	BE373477.1	EST_HUMAN	601237565T_NHL1/MYC_44 Homo sapiens cDNA clone IMAGE:36026568.5		
2012 11904 12739	1.86	1.0E-110	EF000868.1	EST_HUMAN	U(H)-B14-aap-b-04-U1-a1 CGAP Sub1 Homo sapiens cDNA clone IMAGE:3057784.3		
2810 12776	1.02	1.0E-110	4620006 NT	EST_HUMAN	Homo sapiens chronodolin sulfite proteoglycan 4 (melanoma-associated) (CSPA4), mRNA		
3048 12976			1.07	1.0E-110	U78027.1	Homo sapiens F113 (P1-P2) genes, complete cds	(L44L)
3168 13083 22896	1.87	1.0E-110	11436041 NT	EST_HUMAN	Homo sapiens pregnacy-zone protein (PZP), mRNA		
3168 13083 22896	1.87	1.0E-110	11436041 NT	EST_HUMAN	Homo sapiens pregnacy-zone protein (PZP), mRNA		
3868 13873 23650	0.92	1.0E-110	BE016866.1	EST_HUMAN	KIAA0509 PROTEIN;		
4653 14426 24207			2.06	1.0E-110	AB072723.1	cds:2610.x1 Scores: 117123.1	
4655 14447 24232	2.08	1.0E-110	AB117812.1	EST_HUMAN	SW-N121_RAT_P5259_NUCLEAR ENVELOPE PORF MEMBRANE PROTEIN POM121;		
4898 14778			2.34	1.0E-110	70552441 NT	Homo sapiens KIAA0502 protein (KIAA0502), mRNA	
6237 16161 24620	1.9	1.0E-110	EE286406.1	EST_HUMAN	60116710F1_NHL1/MYC_71 Homo sapiens cDNA clone IMAGE:30265638.5		
6511 16429 25482	7.34	1.0E-110	11410323 NT	EST_HUMAN	Homo sapiens hypophyseal protein FLJ10300 (FLJ10300), mRNA		
6511 16429 25483	7.34	1.0E-110	11410323 NT	EST_HUMAN	Homo sapiens hypophyseal protein FLJ10300 (FLJ10300), mRNA		
6032 19455 26068	4.36	1.0E-110	N65121.1	EST_HUMAN	Human cyclic nucleotide-gated channel regulator (CNR), gene, exon 7		
6391 16535 28413	10.04	1.0E-110	AV714278.1	EST_HUMAN	AV714278_DCB_Homo sapiens cDNA clone DGBGE01.5		
6391 16535 28414	10.04	1.0E-110	AV714278.1	EST_HUMAN	AV714278_DCB_Homo sapiens cDNA clone DGBGE01.5		
6409 1670 26452	2.7	1.0E-110	AB020675.1	EST_HUMAN	Homo sapiens mRNA for KIAA0588 protein, partial cds		

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 Table 4
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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7523	17574	27583	2.91	1.0E-110	KW838394.1	EST_HUMAN	GIV2-T065-020400-118-04 LT0053 Homo sapiens cDNA
7815	17765	28004	4.27	1.0E-110	11432722_NT	EST_HUMAN	Homo sapiens galactosidase-2 (GAL2) mRNA
8130	18618	28266	3.7	1.0E-110	Y12337.1	NT	H. sapiens mRNA for myotonic dystrophy protein kinase like Protein
8334	18211	28462	3.49	1.0E-110	BE734357.1	EST_HUMAN	6011685044F1 NH_1 MGC_21 Homo sapiens cDNA clone IMAGE:53840433 6'
8334	18211	28463	3.49	1.0E-110	BE734357.1	EST_HUMAN	6011685044F1 NH_1 MGC_21 Homo sapiens cDNA clone IMAGE:53840433 5
8740	17886	28135	2.43	1.0E-110	AAA44629.1	EST_HUMAN	2w67Q20.1 Scores: nt NT Human sapiens cDNA clone IMAGE:781288 5' similar to TR-G1148816 G1148519 FKS84;
9081	18857	18635	5.78	1.0E-110	AV002258.1	EST_HUMAN	6011685044F1 NH_1 MGC_22 Homo sapiens cDNA clone IMAGE:53824548 5'
9444	19860	10490	1.63	1.0E-110	AB011389.1	NT	Homo sapiens gene for At-5, complete cds
9578	19844	10140	5.07	1.0E-110	BF384506.1	EST_HUMAN	Human ribosomal protein L2a mRNA, complete cds
168	10161	19976	1.02	1.0E-111	BF035327.1	EST_HUMAN	Homo sapiens eye syndrome critical region gene 1 (CECR1) mRNA
728	10556	20459	3.58	1.0E-111	85905092	NT	6011685044F1 NH_1 MGC_23 Homo sapiens cDNA clone IMAGE:53820866 5'
718	10550	10550	1.87	1.0E-111	BF035327.1	EST_HUMAN	Homo sapiens sex comb on midleg homeobox 1 (SCMH1) mRNA
811	10835	20564	73.62	1.0E-111	W2512.1	NT	Human cardiac alpha-myosin heavy chain (MHC) gene, exons 32 to 34
3642	13560	23342	1.71	1.0E-111	60126411	EST_HUMAN	Homo sapiens sex comb on midleg homeobox 1 (SCMH1) mRNA
3642	13560	23343	1.17	1.0E-111	60126511	EST_HUMAN	Homo sapiens sex comb on midleg homeobox 1 (SCMH1) mRNA
4080	13882	23780	1.08	1.0E-111	7051566	EST_HUMAN	Human aspartyl (O-CH3) peptidase (ACCP) mRNA
4235	14133	23909	4.45	1.0E-111	K02238.1	NT	Human aspartyl (O-CH3) peptidase, usher, exon 4 and 5 flanking and complete cds
6364	15284	28117	2.82	1.0E-111	AA151017.1	EST_HUMAN	247407.1 Scores: Repetent, usher, NHSPU Human sapiens cDNA clone IMAGE:505045 5' similar to gb:X03740
5334	15284	29118	2.82	1.0E-111	AA151017.1	EST_HUMAN	gb:X02575 PREGNANCY-SPECIFIC BE7-1 GLYCOPROTEIN C PRECURSOR (HUMAN);
5675	15584	25685	1.71	1.0E-111	AA144679.1	EST_HUMAN	gb:Q912.X1 NCL CCAP-1X5 Human sapiens cDNA clone IMAGE:20783305 5'
6402	16285	28423	3.03	1.0E-111	BF566228.1	EST_HUMAN	IL-2N 0101-2807000-11-E03 NT0101 Human sapiens cDNA
6570	16437	26937	2.20	1.0E-111	AA138014.1	EST_HUMAN	7zba12.11 Strategies muscle 937299 Human sapiens cDNA clone IMAGE:502774 5' similar to gb:X03740
6795	16674	28886	3.13	1.0E-111	UB6533.1	NT	Human beta-1,4-galactosidase (GBA) gene, exon 13
7113	16860	10221	10.8	1.0E-111	BF214902.1	EST_HUMAN	6011685042F1 NH_1 MGC_21 Human sapiens cDNA clone IMAGE:20783305 5'
7149	17026	27221	13.75	1.0E-111	X17033.1	NT	Human mRNA for integrin alpha-2 subunit
7149	17026	27222	13.75	1.0E-111	X17033.1	NT	Human mRNA for integrin alpha-2 subunit
7251	17128	27321	3.26	1.0E-111	AF001395.1	NT	Homo sapiens Tiro isoform mRNA, complete cds

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Single Exon Probes Express

Probe	Exon	ORF SEQ ID NO:	ORF SEQ ID NO:	Top Hit BLAST E Value	Most Similar Expression Signal	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7840	17860	27935	1.51	1.0E-111	AA0510100.1	TEST_HUMAN	aa\$S902x1 NCI CGAP Homo sapiens cDNA clone IMAGE:232170_3' similar to gbk:05235	
78593	17743	27986	6.35	1.0E-111	AA131248.1	TEST_HUMAN	aa\$S902x1 NCI CGAP Homo sapiens cDNA clone IMAGE:232170_3' similar to gbk:05235	
8401	18277	28259	4.52	1.0E-111	U68156.1	NT	Human thrombomodulin receptor (NPL) gene, exons 1,2,3,4,5 and 6	
9035	18825	28110	3.04	1.0E-111	U1147001	TEST_HUMAN	Human saptins methionylated in translation 1 (MINT1), mRNA	
94859	19459	28130	1.69	1.0E-111	W26223.1	TEST_HUMAN	Homo sapiens retina cDNA clone IMAGE:232170_3' (sp50) cleaved salivary homologous cDNA not directional	
98650	18422	28172	1.39	1.0E-111	U1145040	TEST_HUMAN	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA	
98650	18422	28172	1.39	1.0E-111	U1145040	TEST_HUMAN	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA	
592	10528	20335	2.66	1.0E-111	AB016844	NT	Homo sapiens acetyl-CoA acyl transferase beta (ACACB), mRNA	
594	10530	20337	4.49	1.0E-111	U29103.1	NT	Human steroidogenic acute regulatory protein (StAR), gene, exon 5	
594	10530	20338	4.49	1.0E-111	U29103.1	NT	Human steroidogenic acute regulatory protein (StAR), gene, exon 5	
616	10522	20363	1.48	1.0E-111	AB050020	TEST_HUMAN	U+H-B14-89-a-040-15+NCL CgAp Stab 1 Mono saptins cDNA clone IMAGE:30169623_3'	
616	10522	20364	1.48	1.0E-112	BF500039.1	TEST_HUMAN	U+H-B14-89-a-040-15+NCL CgAp Stab 1 Mono saptins cDNA clone IMAGE:30169623_3'	
985	10086	20763	2.78	1.0E-112	AB0157623.1	NT	Homo sapiens serine protease (PRSS11) gene, complete cds	
1046	10984	20805	1.72	1.0E-112	P27272	SWISSPROT	ZINC FINGER PROTEIN_135	
10653	11580	21424	5.88	1.0E-112	70662126	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA	
11590	21425	5.98	1.0E-112	70662125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA		
24601	12337	2231	2.45	1.0E-112	HE008865.1	TEST_HUMAN	U01442314P1 NIH 3T3	
48463	14533	23210	0.83	1.0E-112	AB037682.1	TEST_HUMAN	U0144230200-1128_B7000_Homo sapiens cDNA clone IMAGE:3846558_B'	
48463	14533	23210	5.12	1.0E-112	AB037682.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds	
5170	15065	24204	5.94	1.0E-112	AB037682.1	NT	Homo sapiens low density lipoprotein receptor related protein-deleted in tumor (LRPDT), mRNA	
54771	15397	25463	33.34	1.0E-112	NA0006.1	TEST_HUMAN	Y56507-11 Scores melanocyte 2B10/Homo sapiens cDNA clone IMAGE:273229_5'	
6340	16203	26364	1.81	1.0E-112	11419777	NT		
6340	16845	26395	1.81	1.0E-112	AA118051.1	EST_HUMAN	Homo sapiens adrenergic receptor family 6 (neurotransmitter transporter, L-praline), member 7 (SLC6A7), mRNA	
67655	16845	26394	1.65	1.0E-112	AB082653.1	EST_HUMAN	aa\$S902x1 NCI CGAP Homo sapiens cDNA clone IMAGE:232170_3' similar to gbk:05235	
7181	17058	27247	2.25	1.0E-112	B58765.1	EST_HUMAN	aa\$S902x1 NCI CGAP Homo sapiens cDNA clone IMAGE:232170_3' similar to gbk:05235	
7893	17543	27248	2.25	1.0E-112	B58765.1	EST_HUMAN	aa\$S902x1 NCI CGAP Homo sapiens cDNA clone IMAGE:232170_3' similar to gbk:05235	
8159	18047	27279	2.09	1.0E-112	BF111413.1	EST_HUMAN	T8007W35 Clarity 3.5-347.9 PROTEIN : P_S1	
8159	18045	28239	4.25	1.0E-112	AB083327.1	EST_HUMAN	aa\$S902x1 NCI CGAP Homo sapiens cDNA clone IMAGE:30169623_3'	

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Probe SEQ ID NO.	Exon ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Assessment No.	Top Hit Database Source	EST HUMAN	Top Hit Descriptor
8445 18319	28578		1.72	1.0E-112	BE28478.1		00116532351 NIH_MCG_21 Homo sapiens cDNA clone IMAGE:1838905 similar to TR-QB4362 Qe362
8500 18373	28657		1.75	1.0E-112	AT72003.1	EST HUMAN	FUSED TOES ; 0124040616 NCBI_GSAP_Kid3 Homo sapiens cDNA clone IMAGE:1839902 5 similar to TR-QB4362 Qe362
8500 18373	28638		1.75	1.0E-112	AT72003.1	EST HUMAN	FUSED TOES ;
8521 18393	28657		5	1.0E-112	AV376707.1	EST HUMAN	0010563001-H02 CT0237 Homo sapiens cDNA IMAGE:1869385 3'
725 10657	20487		3.71	1.0E-113	AB465598.1	EST HUMAN	0008901_x1 Schiller methionine Homo sapiens cDNA clone IMAGE:1869385 3'
725 10657	20488		3.71	1.0E-113	AB465586.1	EST HUMAN	0008901_x1 Schiller methionine Homo sapiens cDNA clone IMAGE:1869385 3'
827 10652	20701		0.32	1.0E-113	AM1955.1	NT	Human Y-linked phosphatidylinositol kinase gene, exon 8.
1523 11428	21286		2.94	1.0E-113	AB465586.1	EST HUMAN	0008901_x1 Schiller methionine Homo sapiens cDNA clone IMAGE:1869385 3'
2045 11939	21833		1.18	1.0E-113	BF51218.1	EST HUMAN	UH-BW_4-en-103-CU-5 tNCL_OGAP_Sub7 Homo sapiens cDNA clone IMAGE:3092878 3'
2405 12282	22179		0.66	1.0E-113	A003976.1	NT	Hom sapiens tRNA for putative RNA helicase, 3' end
3091 13018	22873		2.34	1.0E-113	A022949.1	NT	Hom sapiens tRNA for putative RNA helicase, 3' end
50335 14907	24677		0.96	1.0E-113	6757055_NT	Hom sapiens tRNA for putative RNA helicase, 3' end	Hom sapiens v-sarv avian erythroblastosis virus E26 oncogene related (ERS) mRNA
60335 14907	24578		0.96	1.0E-113	6757055_NT	Hom sapiens v-sarv avian erythroblastosis virus E26 oncogene related (ERS) mRNA	Hom sapiens v-sarv avian erythroblastosis virus E26 oncogene related (ERS) mRNA
6211 19824	16297		16.27	1.0E-113	BF50808.1	EST HUMAN	001469465F NIH_MCG_37 Homo sapiens cDNA clone IMAGE:3092878 6'
63777 15297	28144		6.33	1.0E-113	AU127214.1	EST HUMAN	001469465F NIH_MCG_37 Homo sapiens cDNA clone N12F2000867 5'
66018 15523	28656		3.62	1.0E-113	AU146291.1	EST HUMAN	AU127214.1 NT2R222 Homo sapiens cDNA clone PLACE:20030274 5'
5660 15608	26710		2.05	1.0E-113	11629737_NT	EST HUMAN	Hom sapiens IDPN-N-acetyl-alpha-D-glucosaminidase/polysaccharide:N-acetylgalactosaminidyltransferase 8
7257 17134	27326		2.98	1.0E-113	BE382042.1	EST HUMAN	001207709F NIH_MCG_19 Homo sapiens cDNA clone IMAGE:3092878 5'
7257 17134	27327		2.95	1.0E-113	BE382042.1	EST HUMAN	001207709F NIH_MCG_19 Homo sapiens cDNA clone IMAGE:3092878 5'
7655 17506	27731		1.26	1.0E-113	11426367_NT	EST HUMAN	001207709F NIH_MCG_19 Homo sapiens cDNA clone IMAGE:3092878 5'
8465 18359	28554		1.73	1.0E-113	AV56059.1	EST HUMAN	UHE_Eho-Arg-Lp-12A_Ut1 NIH_MCG_53 Homo sapiens cDNA clone IMAGE:3092878 5'
8550 15719	28852		2.07	1.0E-113	6000002_NT	Hom sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A, (GRIN2A) mRNA	Hom sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A, (GRIN2A) mRNA
8584 18452	28721		3.44	1.0E-113	BE202968.1	EST HUMAN	601105520F1 NIH_MCG_15 Homo sapiens cDNA clone IMAGE:2988386 5'
							yHFE151-Stereo file New spleen INF-S Home sapiens cDNA clone IMAGE:1029283 3 similar to gfa521181 ALPH4-MACROGLOBULIN PRECURSOR (HUMAN) contains Ali repetitive element;
623 10898	20376		7.66	1.0E-114	705651.1	EST HUMAN	Hom sapiens hypothetical protein FLJ20080 (FLJ20080) mRNA
1055 10972	20815		1.31	1.0E-114	8623087_NT	Hom sapiens bidirectional tumor induction region protein 1 (RDR1) mRNA	Hom sapiens bidirectional tumor induction region protein 1 (RDR1) mRNA
1291 11188	21053		3.47	1.0E-114	7657529_NT	Hom sapiens nucleophipin-like protein 1 (NLP1) mRNA	Hom sapiens nucleophipin-like protein 1 (NLP1) mRNA
1648 11682	21413		5.63	1.0E-114	6679763_NT	Hom sapiens KIAA1270 protein, partial cds	Hom sapiens KIAA1270 protein, partial cds
2773 10025	19823		0.82	1.0E-114	AB033102.1	NT	

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Meet Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2773	10/026	19824	0.82	1.0E-114	AB053102.1	NT	Homo sapiens mRNA for KIAA0276 protein, partial cds Human gene for caldeox (EC:1.1.1.5) exon 2 mapping to chromosome 11, band p13
3092	13019	228/14	2.29	1.0E-114	X04086.1	NT	Human gene for caldeox (EC:1.1.1.5) exon 2 mapping to chromosome 11, band p13
3135	13060	228/9	1.2	1.0E-114	BF203574.1	EST_HUMAN	601893282F1_NIH MCG_19 Homo sapiens cDNA clone IMAGE:11002145
3934	13843	236/21	1.95	1.0E-114	AF497751	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
5120	14898	247/02	1.2	1.0E-114	AA184468.1	EST_HUMAN	zg05061.81 Strategus muscle 63/20 Homo sapiens cDNA clone IMAGE:5289324 & similar to contains MER22_B MER22 repetitive element;
5121	14899	247/63	2.31	1.0E-114	AF004849.1	NT	Homo sapiens PKY protein kinase mRNA, complete cds
5346	15237	250/40	1.37	1.0E-114	4506890	NT	Homo sapiens sem1 domain, seven transmembrane repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) SA (SEMA5A) mRNA
6316	15237	250/41	1.37	1.0E-114	4506890	NT	Homo sapiens sem1 domain, seven transmembrane repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) SA (SEMA5A) mRNA
6316	16/79	263/38	7.08	1.0E-114	YH18000.1	NT	(Homo sapiens NF2 gene)
6316	16/79	263/39	7.08	1.0E-114	YH18000.1	NT	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2/GABRA2 mRNA
6316	16/86	269/73	1.86	1.0E-114	AB185159.1	EST_HUMAN	6056061.61 NC_002458_Bm25_Homo sapiens cDNA clone IMAGE:2017163 3'
6748	16/227	269/14	1.73	1.0E-114	AB185159.1	EST_HUMAN	6056061.61 NC_002458_Bm25_Homo sapiens cDNA clone IMAGE:2017163 3'
6748	16/227	289/16	0.73	1.0E-114	AB185159.1	EST_HUMAN	6056061.61 NC_002458_Bm25_Homo sapiens cDNA clone IMAGE:2017163 3'
7048	16/225	271/16	3.39	1.0E-114	U03041.1	NT	Human neural cell adhesion molecule CD30 mRNA, complete cds
7050	16/867	271/61	6.35	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
7050	16/867	271/62	6.35	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
7418	17/285	37/3	1.0E-114	AV327185.1	EST_HUMAN	2420/61.61 NC_002458_Bm25_Homo sapiens cDNA clone IMAGE:204674 4'	
7447	18/459	289/62	3.13	1.0E-114	AF077754.1	NT	Homo sapiens tyrosine kinase proto-oncogene (SRC) gene, exon 12 and partial cds
7841	17/944	279/40	1.31	1.0E-114	AL163227.2	NT	Homo sapiens chromosome 21 segment 11S21C07
8167	19/055		7.14	1.0E-114	BE302696.1	EST_HUMAN	ba79/12/11 NIH MCG_20_Homo sapiens cDNA clone IMAGE:2009096 5' similar to gb:X17296 406
8527	18/969	286/66	4.58	1.0E-114	AV7383454.1	EST_HUMAN	RBDSOMAL PROTEIN 54 (HUMAN), gray/M20632_House LRR5 protein mRNA from a repetitive element, complete (MOUSE);
8527	18/99	286/67	4.58	1.0E-114	AV7383454.1	EST_HUMAN	AN7383454_cds_Homo sapiens cDNA clone cdaBA08 6'
8834	18/647	289/32	2.86	1.0E-114	AV7383454.1	EST_HUMAN	AN7383454_cds_Homo sapiens cDNA clone cdaBA08 6'
8834	18/647	289/33	2.86	1.0E-114	AV7383454.1	EST_HUMAN	AN7383454_cds_Homo sapiens cDNA clone cdaBA08 6'
8834	18/647	289/33	2.86	1.0E-114	AV7383454.1	EST_HUMAN	AN7383454_cds_Homo sapiens cDNA clone cdaBA08 6'
9479	19/748	25/222	3.21	1.0E-114	AY109401	NT	Homo sapiens TNF-inducible protein OG12-1 (OG12-1), mRNA
9729	19/266	25/23	3.06	1.0E-114	11034850	NT	Homo sapiens hypothetical protein (D1042K10.2), mRNA
21	10/008	19801	3.36	1.0E-115	4798111	NT	Homo sapiens HLA-B associated transcript (D8581E) mRNA
25	10/059	19820	0.95	1.0E-115	45065388	NT	Homo sapiens poly(A)-directed polypeptide A (22NC) (POLRA) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
							Top Hit EST_HUMAN	Top Hit Descriptor
129	10103	10265	20073	1.99	1.0E-115	AV804739_1	4557083	NT
269	10467	20278	2.17	1.0E-115	AV804739_1	EST_HUMAN	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Hom sapien keratin 18 (KRT18) mRNA
625	10467	20279	1.08	1.0E-115	A1339206_1	EST_HUMAN	q0601_x1_NCL_CGAP_GCA_Homo_sapiens_cDNA_clone IMAGE:19465093 similar to FR-0060594_O006583	TF41 INTERACTING PEPTIDE 5
729	10699	20637	1.05	1.0E-115	A1339206_1	EST_HUMAN	q0601_x1_NCL_CGAP_GCA_Homo_sapiens_cDNA_clone IMAGE:19465093 similar to TR-0060594_O006583	TF41 INTERACTING PEPTIDE 5
769	10699	20638	1.63	1.0E-115	51747028_1	EST_HUMAN	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_kinase-binding protein 1 (TAK1) mRNA	Hom sapien transforming growth factor beta-activated kinase-binding protein 1 (TAK1) mRNA
771	10701	20640	1.92	1.0E-115	4533794_1	EST_HUMAN	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_fatty_acid-binding protein (FABP) mRNA	Hom sapien fatty acid-binding protein (FABP) mRNA
1539	11443	21300	0.92	1.0E-115	AF229180_1	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_alpha-aminoacidic semi-aldehyde synthase mRNA	Hom sapien alpha-aminoacidic semi-aldehyde synthase mRNA, complete cds
1539	11443	21302	0.92	1.0E-115	AF229180_1	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_alpha-aminoacidic semi-aldehyde synthase mRNA	Hom sapien alpha-aminoacidic semi-aldehyde synthase mRNA, complete cds
1785	11683	21561	3.14	1.0E-115	A1277850_1	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_alpha-D-galactosidase A (GLA) mRNA	Hom sapien alpha-D-galactosidase A (GLA) mRNA
1786	11686	21573	1.42	1.0E-115	U78027_1	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_alpha-D-galactosidase A (GLA) mRNA	Hom sapien alpha-D-galactosidase A (GLA) mRNA
2034	11927	21817	0.87	1.0E-115	BE745466_1	EST_HUMAN	601579863587_HMGIC_Homo_sapiens_cDNA_clone IMAGE:32828832	HMGIC_Homo_sapiens_cDNA_clone IMAGE:32828832
2034	11925	21818	0.87	1.0E-115	BE745466_1	EST_HUMAN	601579863587_HMGIC_Homo_sapiens_cDNA_clone IMAGE:32828832	HMGIC_Homo_sapiens_cDNA_clone IMAGE:32828832
2820	12749	22795	1.76	1.0E-115	AV804759_1	EST_HUMAN	CV44UM0094_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Hom sapien cDNA_CV44UM0094_Homo sapiens cDNA
307	13004	22796	2.1	1.0E-115	A1285022_1	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Hom sapien cDNA_CV44UM0094_Homo sapiens cDNA
307	13004	22797	2.1	1.0E-115	A1285022_1	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Hom sapien cDNA_CV44UM0094_Homo sapiens cDNA
3427	13344	23146	4.03	1.0E-115	AF277862_1	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Hom sapien cDNA_CV44UM0094_Homo sapiens cDNA
305	13864	23840	4.04	1.0E-115	AF277862_2	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Hom sapien cDNA_CV44UM0094_Homo sapiens cDNA
4169	14095	23844	1.08	1.0E-115	AL37103_1	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Novel human gene mapping to chromosome X
4501	14169	23893	3.41	1.0E-115	6812686	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Hom sapien skille 3 (SKILL3) mRNA
4535	14232	24014	3.83	1.0E-115	4738279	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Hom sapien EthA(H) mRNA
4878	14468	24254	2.58	1.0E-115	AL096865_1	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Novel human mRNA from chromosome 1 which has similarities to BAT2 genes
4878	14468	24255	2.58	1.0E-115	AL096865_1	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Novel human mRNA from chromosome 1 which has similarities to BAT2 genes
4878	14468	24482	2.96	1.0E-115	AL163269_2	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Novel human mRNA from chromosome 21 segment HS21_C008
4878	14468	24483	2.98	1.0E-115	AL163269_2	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Novel human mRNA from chromosome 21 segment HS21_C008
5279	15277	24977	1.75	1.0E-115	W912585_1	EST_HUMAN	E57482446_MAFB_receptor-binding domain	MAFB_Homo sapiens cDNA IMAGE:22767395
5330	15350	25076	7.22	1.0E-115	BF005387_1	EST_HUMAN	6021150467_NFH_MGC_56_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	NFH_Homo sapiens cDNA_CV44UM0094
5422	15321	25370	2.05	1.0E-115	BF125128	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Hom sapien similar to ER to nucleus signalling 1 (H ₊)
5652	15788	28976	12.92	1.0E-115	11426038	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Hom sapien similar to fibromodulin S26 (H ₊)
5933	15838	25950	1.93	1.0E-115	761985	NT	F ₀ 060594_Homo_sapiens_cDNA_CV44UM0094_Homo_sapiens_cDNA_CV44UM0094	Hom sapien KIAA0405 gene product; Helicase (KIAA0405), mRNA

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 Table 4
 Single Exon Probes Expressed in Heart

Probe SEQ ID No:	Exon SEQ ID No:	ORF SEQ ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5933	15538	259501	1.93	1.0E-116	70518283	NT	Human sapiens KIAA00564 gene product, Helicase (KIAA00564). mRNA
6313	16176	283331	1.55	1.0E-115	AM076568.1	EST_HUMAN	c231405_x1_Scores: total, feline. N126HF8_Bv Homo sapiens cDNA clone IMAGE:1673914.3
6313	16176	20334	1.55	1.0E-115	AM076568.1	NT	Human sapiens cDNA clone IMAGE:1673914.3
6379	16241	28401	7.41	1.0E-115	AB025212.1	NT	Human sapiens mRNA for KIAA00564 protein, partial cds
6744	16623	288111	12.78	1.0E-115	BE830187.1	EST_HUMAN	TC#E-T0081-30700-011-001 E7081_Homo sapiens cDNA
6744	16623	288112	12.78	1.0E-115	BE830187.1	EST_HUMAN	TC#E-T0081-30700-011-001 E7081_Homo sapiens cDNA
7116	16963	27184	2.2	1.0E-115	11434722	NT	Human sapiens sukkarai translocation initiation factor 4B (ELF4B). mRNA
7715	17616	27816	1.92	1.0E-115	AB002398.1	NT	Human mRNA for KIAA0336 gene, partial cds
7745	17606	27817	1.92	1.0E-115	AB002398.1	NT	Human mRNA for KIAA0336 gene, partial cds
8100	17960	28239	3.5	1.0E-115	AV571544.1	EST_HUMAN	x03208_x1_NCL_CGAP_0H Homo sapiens cDNA clone IMAGE:28357239 3' similar to SW:CAVP_CANFA
8701	18516	28901	2.26	1.0E-115	4502628	NT	Human sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E) mRNA
8920	18650	20306	1.42	1.0E-115	BE275602.1	EST_HUMAN	60121347FT1 NIH 3T3 CALYTHOSINE-
783	10713	20562	1.25	1.0E-116	4501734	NT	Human sapiens synaptobatin 1 (SYNB1). mRNA
841	10768	21013	6.89	1.0E-116	4501734	NT	Human sapiens synaptobatin 1 (SYNB1). mRNA
1982	11847	21733	2.38	1.0E-116	5174478	NT	Human sapiens pericardin (PCNT) mRNA
1982	11847	21734	2.36	1.0E-116	5174478	NT	Human sapiens pericardin (PCNT) mRNA
1980	11873	21765	1.21	1.0E-116	AM19390.1	EST_HUMAN	U13360_NTR2P_Homo sapiens cDNA clone NT2RP4604002285
2050	12711	21884	1.01	1.0E-116	MT9824.1	NT	Human apolipoprotein E-100 (apoE) gene, exons 7, 17 and 18
2050	12711	21835	1.01	1.0E-116	MT9824.1	NT	Human apolipoprotein E-100 (apoE) gene, exons 7, 17 and 18
2236	12143	22042	1.88	1.0E-116	545941	NT	Human sapiens protein phosphatase, EF hand calcium-binding domain 1 (PPEF1) mRNA
2238	12175	21733	1.49	1.0E-116	UT8308.1	NT	Human olfactory receptor, eff-1/2a-1/1 (OR17-1/2/17-1/1) pseudogene, complete cds
2407	12284	22181	4.48	1.0E-116	AB018333.1	NT	Human sapiens mRNA for KIAA0780 protein, partial cds
2704	12656	22468	2.19	1.0E-116	BE889256.1	EST_HUMAN	601513337FT1 NIH/MSC_71_Homo sapiens cDNA clone IMAGE:1914800.6
3137	13062	22860	4.73	1.0E-116	L77670.1	NT	Human sapiens DiGeorge syndrome critical region, centromeric end
3137	13062	22861	4.73	1.0E-116	L77670.1	NT	Human sapiens DiGeorge syndrome critical region, centromeric end
4231	14180	23968	2.01	1.0E-116	6031984	NT	Human sapiens ordn, phorbol ester translocator 3 (NET3). mRNA
4747	14632	24418	2.17	1.0E-116	AB07005.1	EST_HUMAN	PM-B1-05-07409-016 BE135_Homo sapiens cDNA
5122	14990	24784	1.2	1.0E-116	AJ242323.1	NT	PM-B1-05-07409-016 BE135_Homo sapiens cDNA
5607	15550	25641	5.88	1.0E-116	W48222.1	EST_HUMAN	2C2d07.11 Scores: sequenom, fibroblast, NIH/HSF Homo sapiens cDNA clone IMAGE:322425.6 similar to SW:1ADHM_MOUSE_P06249 MALATE DEHYDROGENASE, MITOCHONDRIAL PRECURSOR;
5768	15676	25781	1.65	1.0E-116	AB03856.1	NT	Human sapiens mRNA for KIAA1886 protein, partial cds

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Probe	Exon	ORF Seq ID No.	ORF Seq ID No.:	Expression Signal Value	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
								Top Hit	Accession No.
57685	15675	25782	1.65	1.0E-116	AB048896.1	EST HUMAN	Homo sapiens mRNA for KIAA0565 protein, partial cds	Homo sapiens mRNA for KIAA0565 protein, partial cds	
56953	15759	25877	7.18	1.0E-116	BFR77910.1	EST HUMAN	Homo sapiens cDNA clone IMAGE:12490875	Homo sapiens cDNA clone IMAGE:12490875	
65224	15829	56219	1.78	1.0E-116	MRA2H10379-1 NIH_3T3	EST HUMAN	Homo sapiens cDNA clone IMAGE:12490876	Homo sapiens cDNA clone IMAGE:12490876	
61454	16108	26156	3.59	1.0E-116	CDD944-1	EST HUMAN	CDD944-1 Human heart cDNA (Yaknamure) Homo sapiens cDNA clone IMAGE:12490875	CDD944-1 Human heart cDNA (Yaknamure) Homo sapiens cDNA clone IMAGE:12490875	
62757	16190	26295	7.97	1.0E-116	AV716314.1	EST HUMAN	Homo sapiens cDNA 5' end similar to keratin 2	Homo sapiens cDNA 5' end similar to keratin 2	
68747	16753	26949	1.98	1.0E-116	AAS45265.1	EST HUMAN	Homo sapiens cDNA clone IMAGE:12490876	Homo sapiens cDNA clone IMAGE:12490876	
68747	16753	26950	1.98	1.0E-116	AAS45265.1	EST HUMAN	Homo sapiens cDNA clone IMAGE:12490876	Homo sapiens cDNA clone IMAGE:12490876	
7173	17050	27239	1.49	1.0E-116	BE565507.1	EST HUMAN	NP_005071.1 Human GPC3 gene, partial cds	NP_005071.1 Human GPC3 gene, partial cds	
7260	17137	27330	1.98	1.0E-116	A1218532.1	EST HUMAN	NP_001121853.1 Human isoform 1 preproprotein kinase-like 1 isoform (Human).	NP_001121853.1 Human isoform 1 preproprotein kinase-like 1 isoform (Human).	
7577	17428	27842	1.77	1.0E-116	AAV1B6461	EST HUMAN	Homo sapiens laminin, alpha 2 (mercapto, congenital muscular dystrophy) (LAMA2), mRNA	Homo sapiens laminin, alpha 2 (mercapto, congenital muscular dystrophy) (LAMA2), mRNA	
80774	17945	28216	3.68	1.0E-116	BF353846.1	EST HUMAN	NP_041041.1 Sarcosine, N-methyl-N-sarcosine mRNA	NP_041041.1 Sarcosine, N-methyl-N-sarcosine mRNA	
8477	18360	28916	3.23	1.0E-116	A1567140.1	EST HUMAN	CE17155; NP_003301.1 NIH_3T3	CE17155; NP_003301.1 NIH_3T3	
6591	19741	19714	2.08	1.0E-116	BE565506.1	EST HUMAN	NP_005506.1 Human GPC3 gene, full length	NP_005506.1 Human GPC3 gene, full length	
9776	19844	20206	2.68	1.0E-116	A134859.1	EST HUMAN	NP_00134859.1 Human GPC3 gene, full length	NP_00134859.1 Human GPC3 gene, full length	
3463	1987	20206	1.18	1.0E-117	AF243933	EST HUMAN	Homo sapiens acetyl-CoA:ceramidase 1 (ACeCA), mRNA	Homo sapiens acetyl-CoA:ceramidase 1 (ACeCA), mRNA	
1061	19874	20281	1.59	1.0E-117	AF233201	EST HUMAN	NM_0012874 Human mucins Muc-1 (Fut1/Fut2) gene, exon 13a through 15	NM_0012874 Human mucins Muc-1 (Fut1/Fut2) gene, exon 13a through 15	
1719	19820	21498	6.25	1.0E-117	AF233201	EST HUMAN	Homo sapiens lymphocyte activation-associated protein mRNA, complete cds	Homo sapiens lymphocyte activation-associated protein mRNA, complete cds	
1750	19888	21584	2.3	1.0E-117	AF233201	EST HUMAN	Human apolipoprotein B-100 (apoB) gene, exon 10	Human apolipoprotein B-100 (apoB) gene, exon 10	
2164	20151	21962	2.99	1.0E-117	AW567099.1	EST HUMAN	NP_00567099.1 Human apolipoprotein B-100 (apoB) gene, exon 10	NP_00567099.1 Human apolipoprotein B-100 (apoB) gene, exon 10	
3230	13164	23933	1.73	1.0E-117	A9781414.1	EST HUMAN	NP_00781414.1 Human apolipoprotein B-100 (apoB) gene, exon 10	NP_00781414.1 Human apolipoprotein B-100 (apoB) gene, exon 10	
35008	13918	23509	3.62	1.0E-117	A3A16723.1	EST HUMAN	NP_00365641 Human apolipoprotein B-100 (apoB) gene, exon 10	NP_00365641 Human apolipoprotein B-100 (apoB) gene, exon 10	
4247	14146	23820	1.86	1.0E-117	A1402120.1	EST HUMAN	NP_001402120.1 Human apolipoprotein B-100 (apoB) gene, exon 10	NP_001402120.1 Human apolipoprotein B-100 (apoB) gene, exon 10	
4475	14386	24158	1.35	1.0E-117	AB86701.1	EST HUMAN	NP_00186701 Human apolipoprotein B-100 (apoB) gene, exon 10	NP_00186701 Human apolipoprotein B-100 (apoB) gene, exon 10	
4622	14510	24329	1.35	1.0E-117	AB86701.1	EST HUMAN	NP_00186701 Human apolipoprotein B-100 (apoB) gene, exon 10	NP_00186701 Human apolipoprotein B-100 (apoB) gene, exon 10	
4705	14591	24320	9.22	1.0E-117	AF134304.2	EST HUMAN	NP_00134304.2 Human partial cds	NP_00134304.2 Human partial cds	
4705	14591	24333	9.22	1.0E-117	AF134304.2	EST HUMAN	NP_00134304.2 Human partial cds	NP_00134304.2 Human partial cds	
4856	14176	24516	3.36	1.0E-117	AB200673.1	EST HUMAN	Homo sapiens mRNA for KIAA0866 protein, complete cds	Homo sapiens mRNA for KIAA0866 protein, complete cds	
5280	15020	24976	2.5	1.0E-117	BE730598.1	EST HUMAN	NP_00620579.1 NIH_3T3	NP_00620579.1 NIH_3T3	
6404	16295	26428	4.99	1.0E-117	L76571.1	EST HUMAN	Homo sapiens nuclear hormone receptor (alp) gene, 3' end of cds	Homo sapiens nuclear hormone receptor (alp) gene, 3' end of cds	
6440	16295	26427	4.99	1.0E-117	L76571.1	EST HUMAN	Homo sapiens nuclear hormone receptor (alp) gene, 3' end of cds	Homo sapiens nuclear hormone receptor (alp) gene, 3' end of cds	

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Table 4
Single Exon Probes Express

Probe	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6455	16316	26462		3.77	1.0E-17	AV717788	EST_HUMAN AV717788 DQB Homo sapiens cDNA clone DQBBAE01 5' w/PR0207-1 NCI CGAP 25 Human complete cDNA clone IMAGE:2468629 3' similar to TR-075065
6655	16316	26483		3.77	1.0E-17	AV717788	EST_HUMAN AV717788 DQB Homo sapiens cDNA clone DQBBAE01 6' w/PR0207-1 NCI CGAP 25 Human complete cDNA clone IMAGE:2468629 3' similar to TR-075065
6651	16631	26795		5.93	1.0E-17	AB10545-1	EST_HUMAN OT76085 KIAA0477 PROTEIN :
6637	16716	26956		1.7	1.0E-17	10633659	EST_HUMAN Home sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
6637	16716	25949		1.7	1.0E-17	10633659	EST_HUMAN Home sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
7235	17228	27428		2.28	1.0E-17	AB10545-1	EST_HUMAN Home sapiens for very low density lipoprotein receptor gene, exon 11
7235	17495	27106		1.51	1.0E-17	BE733922	EST_HUMAN HG0155803177F1 NH MGCG 21 Homo sapiens cDNA clone IMAGE:343748 5'
8085	18082	28512		10.31	1.0E-17	W600056	EST_HUMAN #80851111 Sarcos, fetal heart NH MGCG 21 Bone PROTEO-GEN II PRECURSOR (HUMAN).
8095	18402	28752		3.90	1.0E-17	AB011641	EST_HUMAN Home sapiens mRNA for MEGOF8, partial cds
8095	18402	28753		3.06	1.0E-17	AB011641	EST_HUMAN Home sapiens mRNA for MEGOF8, partial cds
8095	18510	28974		15.63	1.0E-17	BE2688651	EST_HUMAN Home sapiens cDNA clone IMAGE:35442986 5'
8072	18684	28974		2.22	1.0E-17	4601848	EST_HUMAN Home sapiens A1P-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
8872	18684	28975		2.22	1.0E-17	4601848	EST_HUMAN Home sapiens A1P-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
64	19050	18983		9.54	1.0E-18	AF101600	EST_HUMAN DK2746-34056 11 434 (Bayonne, hies) Homo sapiens cDNA clone DK2746-34056 5'
90	19050	18984		2.59	1.0E-18	AL045854	EST_HUMAN Home sapiens hypochlorite protein (O-323E-9a-Ct-1), mRNA
500	10448	20261		6.09	1.0E-18	7057016	EST_HUMAN Home sapiens nucleotide binding protein (Dectoplasma) homolog (SIX1), mRNA
8663	12680	20667		0.98	1.0E-18	5171680	EST_HUMAN Home sapiens one cuticle homeobox (Dectoplasma) homolog (SIX1), mRNA
2186	12073	21975		2.39	1.0E-18	BE389705.051	EST_HUMAN HG012819477F1 NH MGCG 44 Homo sapiens cDNA clone IMAGE:3504019 5'
2186	12073	21977		2.39	1.0E-18	BE389705.051	EST_HUMAN HG012819477F1 NH MGCG 44 Homo sapiens cDNA clone IMAGE:3504019 5'
2281	12166	22465		3.77	1.0E-18	AV615172	EST_HUMAN EST0363596 IMAGE:3504019 5'
2711	12574	22466		2.38	1.0E-18	U07000	EST_HUMAN Human breakpoint cluster region (BCLR) gene, complete cds
3066	12983			3.73	1.0E-18	Y13922	EST_HUMAN Home sapiens PARK7 gene, exon 7
3160	13084	22867		4.61	1.0E-18	AB447394	EST_HUMAN G01051X1 NCJ CGAP 656 Homo sapiens cDNA clone IMAGE:1616769 3'
3160	13084	22868		4.51	1.0E-18	AB447394	EST_HUMAN G01051X1 NCJ CGAP 656 Homo sapiens cDNA clone IMAGE:1616769 3'
30098	13041	23679		7.67	1.0E-18	D26852	EST_HUMAN Human mRNA for ribosomal protein, composite cds
6329	16249	25053		2.02	1.0E-18	AF142624	EST_HUMAN Home sapiens cathepsin gamma 4 subunit (CAGN4) gene, exon 3
6329	16249	25054		2.02	1.0E-18	AF142624	EST_HUMAN Home sapiens cathepsin gamma 4 subunit (CAGN4) gene, exon 3
5620	15536	28620		1.89	1.0E-18	11420734	EST_HUMAN Home sapiens transmembrane receptor potential channel 5 (TRPC5), mRNA
6620	16024	28634		1.87	1.0E-18	4657722	EST_HUMAN Home sapiens latent transforming growth factor beta binding protein 2 (LTBP2), mRNA
6020	16024	28655		1.87	1.0E-18	4657722	EST_HUMAN Home sapiens latent transforming growth factor beta binding protein 2 (LTBP2), mRNA

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6442	16341	26509	4.13	1.0E-118	BE761223.1	EST_HUMAN	Human sapiens chromodome 2 open reading frame 3 (CDORF3) mRNA 501469156F1 NIH_M3C_07 Homo sapiens cDNA clone IMAGE:3972247 5'
6548	16526	26722	2.23	1.0E-118	BT0285.1	EST_HUMAN	Human sapiens cDNA clone IMAGE:3972247 5'
6584	16753	26960	7.61	1.0E-118	BT0285.1	EST_HUMAN	Human sapiens cDNA clone IMAGE:3972247 5'
6584	16763	26951	7.81	1.0E-118	BT0285.1	EST_HUMAN	Human sapiens cDNA clone IMAGE:3972247 5'
6988	16767	26963	1.34	1.0E-118	AA443024.1	EST_HUMAN	268d0f71 Scores_NIH_Hu_PU_ST Homo sapiens cDNA clone IMAGE:811789 5'
6988	16767	26964	1.34	1.0E-118	AA443024.1	EST_HUMAN	268d0f71 Scores_NIH_Hu_PU_ST Homo sapiens cDNA clone IMAGE:811789 5'
7025	16912	27100	1.16	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0383 gene, partial cds
7025	16912	27101	1.16	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0383 gene, partial cds
7068	16868	27129	1.28	1.0E-118	4557732	NT	Human sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA 60144683f2 NIH_M3C_16 Homo sapiens cDNA clone IMAGE:3160952 5'
7062	16930	27130	1.28	1.0E-118	4557732	NT	Human sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA 60144683f2 NIH_M3C_16 Homo sapiens cDNA clone IMAGE:3160952 5'
7223	17700	27288	5.71	1.0E-118	BE263134.1	EST_HUMAN	6717609_xt INCL_CGAP_Bn20 Human proteins cDNA clone IMAGE:356765 3' similar to SW_2F3A_HUMAN
7306	17786	28027	1.18	1.0E-118	BF165407.1	EST_HUMAN	F21754_ZONA PELLUCIDA SPERMBINDING PROTEIN 3A PRECURSOR :
8558	18405	28737	3.06	1.0E-118	AA315007.1	EST_HUMAN	EST188514_HCC all the (metastasis to liver in mouse) II Human sepius DNA 5' end similar to chori, right chain 1, cytoplasmic
8847	18859	28947	1.75	1.0E-118	BF0506887.1	EST_HUMAN	CY001UM0091-120900-385-517 UM0091 Homo sapiens cDNA OY001UM0091-120900-385-517 UM0091 Homo sapiens cDNA
8947	18659	28948	1.76	1.0E-118	BF0506887.1	EST_HUMAN	Human sapiens chloride channel CLC4 CLC4 mRNA, complete cds
741	10872	20508	0.81	1.0E-119	AF170462.1	NT	Human sapiens chloride channel protein LOC55104 mRNA
1021	20853	20761	1.55	1.0E-119	7705007	NT	Human sapiens mRNA for KIAA0630 protein, partial cds
1861	11786	21763	2.09	1.0E-119	AB02347.1	NT	Human sapiens hypothetical protein FLJ10052 (FLJ10052) mRNA
3024	12991	22763	1.81	1.0E-119	8922206	NT	ent005_s1 INCL_CGAP_Lut Human sapiens cDNA clone IMAGE:1569241 3' similar to WF_E04f6.2
3202	13126	23573	1.08	1.0E-119	AA016760.1	EST_HUMAN	CE0124 :
3870	13781	23573	1.15	1.0E-119	4559116	NT	Human sapiens glutamyl receptor, ionotropic, 5, valine 1 (GRK11) mRNA
5111	14870	24753	0.95	1.0E-119	AA077384.1	EST_HUMAN	B14-03 Chromosome 7: Fetal Brain cDNA Library Human sapiens cDNA clone T7314703
5272	15164	24966	2.45	1.0E-119	AL133396.1	EST_HUMAN	AU133396_NT2RP4-Homo sapiens cDNA clone N_T2RP40016901 5'
5282	15204	24980	14.93	1.0E-119	MS8914.1	NT	Human neurofibromin (NF1) gene, complete cds
5285	15207	24984	3.32	1.0E-119	BS536121.1	EST_HUMAN	FC1-NN0007-250805-018-006 NN0073 Homo sapiens cDNA
5336	15265	25079	2.24	1.0E-119	AV605731.1	EST_HUMAN	AV605731_GKC_Homo sapiens cDNA clone GKC-BB3 5'
5726	15033	25730	7.19	1.0E-119	AL150703.1	EST_HUMAN	q677608f1 Scores_fetal heart_NIBETHWU Human sapiens cDNA clone IMAGE:1705128 3' similar to SW_K17C1_MOUSE
5807	15193	25914	2.79	1.0E-119	X02622.1	NT	Human c-fos/fos proto-oncogene
5805	15801	25925	4.28	1.0E-119	AV794493.1	EST_HUMAN	EST386296 MAGE genes sequences, MAGM Homo sapiens cDNA
6351	16213	26403	1.42	1.0E-119	BS786914.1	EST_HUMAN	607652005F1 NIH_M3C_7 Homo sapiens cDNA clone IMAGE:3946861 5'

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Single Exon Proteins Expressed in Heart

Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
7833	1733	27977	1.48	1.0E-119	AA465124.1	EST_HUMAN	aa2265.11 NC_002702.1 Homo sapiens cDNA clone IMAGE:8149775
7988	17848	28089	1.42	1.0E-119	AA297701.1	NT	Homo sapiens partial L-12 receptor beta1 chain, exons 15-17
8535	18407		9.72	1.0E-119	AA275671.1	EST_HUMAN	9021897291 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:43106933 5
9346	19871		1.0E-119	AV847516.1	EST_HUMAN	RCs-CGTC212-246569-01-E8 C1025-Homo sapiens cDNA	
237	10205	20022	1.4	1.0E-120	AB011801.1	EST_HUMAN	Homo sapiens mRNA for KIAA0755 protein, partial cds
288		20082	1.34	1.0E-120	4507534	EST_HUMAN	Homo sapiens intervening 1 (SYN1), mRNA
1025	10943	20787	1.67	1.0E-120	AF248540.1	NT	Homo sapiens intervening 2 (SYN2) mRNA, complete cds
1025	10943	20788	1.67	1.0E-120	AF248540.1	NT	Homo sapiens intervening 2 (SYN2) mRNA, complete cds
1457	11511	21172	1.53	1.0E-120	NA6973.1	EST_HUMAN	hyd0121.21 Soares (Intervening 2b) mRNA, Homo sapiens cDNA clone IMAGE:2737905 5
1583	11487	21348	3.87	1.0E-120	AB787706.1	NT	Homo sapiens cyclin-like repeat-containing protein S52 precursor, mRNA, complete cds
2080	11860	21847	0.9	1.0E-120	AB011386.1	NT	Homo sapiens gene for Ar-6, complete cds
2080	11560	21848	0.9	1.0E-120	AB011386.1	NT	Homo sapiens gene for Ar-6, complete cds
2482	12558	22250	0.84	1.0E-120	4765124	NT	Homo sapiens equilin (4-LOPA), splice variant b, mRNA
326	10262	22082	1.13	1.0E-120	4507534	NT	Homo sapiens synaptosomal (S) (SYN1), mRNA
4280	14159	23935	1.17	1.0E-120	AF056450.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4280	14159	23937	1.17	1.0E-120	AF056450.1	NT	Homo sapiens stanniocalcin (STC) gene, partial cds
4563	14455	24242	2.79	1.0E-120	AF056453.1	NT	Homo sapiens stanniocalcin (STC) gene, partial cds
4563	14455	24243	2.79	1.0E-120	AF056453.1	NT	Homo sapiens stanniocalcin (STC) gene, partial cds
5168	15034	24951	0.89	1.0E-120	AF049603	EST_HUMAN	hyd0163.11 Soares, tellis NIH_Homo sapiens cDNA clone IMAGE:1753981 3
6508	15268	25488	13.84	1.0E-120	BF568222.1	EST_HUMAN	602185954-F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:3300174 5
6499	16298	28495	1.49	1.0E-120	D34619.1	NT	Human TXB2S1 gene for thrombinase synthase, exon 7
6606	16488	28674	1.67	1.0E-120	Y00687.1	NT	Human gene for neofibrillarin subunit M (N-M)
6608	16488	28675	1.67	1.0E-120	Y00687.1	NT	Human gene for neofibrillarin subunit M (N-M)
6850	16729	28924	2.44	1.0E-120	BF337588.1	EST_HUMAN	6020353207-F1C1 CGAP_Brigida Homo sapiens cDNA clone IMAGE:4183333 5
6868	16777	28971	2.43	1.0E-120	AB507984.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0495
6868	16777	28972	2.43	1.0E-120	AB507984.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0495
6922	16800	28929	1.33	1.0E-120	AB507984.1	NT	Homo sapiens mRNA for KIAA0495 protein, partial cds
7470	17330	27535	4.54	1.0E-120	BF592102.1	EST_HUMAN	6021857395-F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3025544 5
7470	17330	27538	4.54	1.0E-120	BF592102.1	EST_HUMAN	6013077589-F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3025544 5
7611	17458	27687	4.72	1.0E-120	BF595451.1	EST_HUMAN	6011888506-F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122876 5
7626	17477	27698	7.31	1.0E-120	AU135205.1	EST_HUMAN	AU135205_N12RP_Homo sapiens cDNA clone N12RP4001541 5
7789	17448	27885	2.53	1.0E-120	AB259001.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
8459	18342	28657	6.4	1.0E-120	BF263887.1	EST_HUMAN	60116727-F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3592015 5

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Probe SEQ ID NC:	Exon SEQ ID NC:	ORF SEQ ID NC:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8914 18722	29013	2.07	1.0E-120	UBA774.1	NT	Human muscle glycogen phosphorylase (PGM1) gene, SUTR and exon 1	
9495 19111	25389	1.36	1.0E-120	11417892	NT	Human selenocysteine binding protein 1 (KIAA0330) mRNA	
67 10952	19887	1.04	1.0E-121	YI8000_1	NT	Human selenoprotein N24 gene	
374 10328	20151	0.98	1.0E-121	AU154603.1	EST_HUMAN	AU7363_PLINE clone PLACE00390_S'	
707 12874	20465	1.23	1.0E-121	50321826	NT	Human saptens TNF receptor-associated factor 1 (TRAF1) mRNA	
1559 11461	21319	0.99	1.0E-121	AB011163.1	NT	Human saptens mRNA for KIAA0581 protein, partial cds	
1923 11816	21697	0.89	1.0E-121	4756599	NT	Human saptens Insulin polyporphosphate-4-phosphatase, type I, 101D (INPP4A), splice variant 4, mRNA	
1923 11816	21988	0.89	1.0E-121	4756599	NT	Human saptens Insulin polyporphosphate-4-phosphatases, type I, 101D (INPP4A), splice variant 4, mRNA	
20565 11946	21841	1.17	1.0E-121	L76631.1	NT	Human saptens metabotropic glutamate receptor 1 beta (mGluR1beta) mRNA, complete cds	
2550 12404	22285	1.05	1.0E-121	BT24_43786.1	EST_HUMAN	6020014759F1_NCI_CGAP_Bird-Homo sapiens cDNA clone IMAGE:4150286_S'	
2550 12404	22286	1.05	1.0E-121	BT24_43787.1	EST_HUMAN	6020014759F1_NCI_CGAP_Bird-Homo sapiens cDNA clone IMAGE:4150286_S'	
3042 12866	22163	3.09	1.0E-121	YI9208.1	NT	Human saptens N45C gene for hair keratin, exons 1 to 9	
3042 12866	22764	3.09	1.0E-121	YI9208.1	NT	Human saptens N45C gene for hair keratin, exons 1 to 9	
3462 13406	22323	1.09	1.0E-121	KIAA1337.1	NT	Human saptens mRNA for KIAA1337 protein, partial cds	
3462 13406	23214	1.09	1.0E-121	AB037768.1	NT	Human saptens mRNA for KIAA1337 protein, partial cds	
3932 13538	23325	0.61	1.0E-121	AF465159.2	NT	Human saptens adenylyl cyclase activating polypeptide-3' apnion subunit mRNA, complete cds	
4258 14134	23910	1.21	1.0E-121	AB262394.1	EST_HUMAN	Human saptens mRNA for CSELP_Pari Homo sapiens cDNA clone IMAGE:2054417_S'	
4901 14781	24866	2.56	1.0E-121	XN1937.1	NT	H_saptene_ECE-1 gene (exon 7)	
5050 14822	24986	1.03	1.0E-121	AI004151.1	EST_HUMAN	CMBT043-0929-076 BT045 Homo sapiens cDNA	
6652 16512	26701	2.58	1.0E-121	D84722.1	NT	Human saptens DNA for proline-rich synthetase, exon 8	
6652 16512	26702	2.58	1.0E-121	D84722.1	NT	Human saptens DNA for proline-rich synthetase, exon 8	
8157 18045	28397	4.44	1.0E-121	11477788	NT	Human saptens COX11 (yeast) homolog, cytochrome c oxidase assembly protein (COX11), mRNA	
8163 18061	28303	2.28	1.0E-121	AF064000.1	NT	Human saptens UDP-glucuronosyltransferase 2B4 precursor (UGT2B4) mRNA, UGT2B4_E458 allele, complete cds	
8336 18213	28466	4.91	1.0E-121	7330354	EST_HUMAN	Human saptens chloride intracellular channel 4 like (CLIC4L), mRNA	
8336 18213	28469	3.48	1.0E-121	N59624.1	NT	JY774d1.151 Scores well new system_NFLS_Homo sapiens cDNA clone IMAGE:2048448_S'	
2557 10232	20047	3.90	1.0E-122	AF114488.1	NT	Human saptens T-cell lymphoma invasion and metastasis 1 (TIA1H1) mRNA	
333 10292	20107	2.22	1.0E-122	AF114488.1	NT	Human saptens interleukin short isoform (ISFSN) mRNA, complete cds	
355 10312	20132	1.54	1.0E-122	11525176	NT	Human saptens T-cell lymphoma invasion and metastasis 1 (TIA1M1) mRNA	
854 10790	20641	2.95	1.0E-122	AF114488.1	NT	Human saptens interleukin short isoform (ISFSN) mRNA, complete cds	
1201 11111	20657	3.41	1.0E-122	M20707.1	NT	Human kappa-immunoglobulin gamma-like pseudogene (Chr22.4) variable region (subgroup V kappa II)	

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 Table 4
 Single Exon Probes Expressed in Heart

Probe Seq ID No:	Exon Seq ID No:	ORF SEQ ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
							Homo sapiens cyclase-rich repeat-containing protein S62 precursor, mRNA, complete cds	
1867	11569	21435	1.32	1.0E-122	AF161706.1	NT	Homo sapiens collagen type XII, alpha 1 (COL12A1), mRNA	
1884	11986	21466	2.01	1.0E-122	114194242	NT	Homo sapiens collagen type XII, alpha 1 (COL12A1), mRNA	
1884	11986	21439	2.01	1.0E-122	11419424	NT	Homo sapiens collagen type XII, alpha 1 (COL12A1), mRNA	
1772	11671	21519	5.91	1.0E-122	BE560802.1	EST_HUMAN	601497025-1 NH_JAK2, 70 Homo sapiens cDNA clone [IMAGE:38633568.5]	
2441	12318	22216	10.56	1.0E-122	BF318170.1	EST_HUMAN	60116001738-1 NH_JAK2, 19 Homo sapiens cDNA clone [IMAGE:4152624.5]	
2441	12318	22216	10.56	1.0E-122	BF318170.1	EST_HUMAN	60116001738-1 NH_JAK2, 19 Homo sapiens cDNA clone [IMAGE:4152624.5]	
4738	14623	24469	1.82	1.0E-122	4652166	NT	Homo sapiens amyloid beta (A4) precursor protein (precursor protein, fibrillease min-11, Alzheimer disease) (APP), mRNA	
4818	14797		1.2	1.0E-122	AW504045.1	EST_HUMAN	6014797-1 NH_JAK2, 50 Homo sapiens cDNA clone [IMAGE:3070948.5]	
6051	15337	-25350	6.41	1.0E-122	BE256039.1	EST_HUMAN	6011153677-1 NH_JAK2, 70 Homo sapiens fetal giant lumen (Drosophila) hemolymph (LLGL2), mRNA	
7219	17098	27286	1.36	1.0E-122	11424216	NT	Homo sapiens phosphomannomutase 1 (PMM1), mRNA	
9398	18365		4.36	1.0E-122	114181537	NT	Homo sapiens phosphomannomutase 1 (PMM1), mRNA	
181	10163	18988	1.07	1.0E-123	U31519.1	NT	Human phosphotryptase trypsin carboxylate esterase (PCK1) gene, promoter region and partial cds	
751	10891	20517	1.72	1.0E-123	BF345274.1	EST_HUMAN	6020180388-1 NC_00481 Brm7 Homo sapiens cDNA clone [IMAGE:4150970.5]	
893	10510	20760	3.79	1.0E-123	AL652409.2	NT	Homo sapiens chromosome 21 segment RS21C049	
1005	10523	20787	6.08	1.0E-123	5802114	NT	Homo sapiens line 1 membrane protein, mitochondrial (mitin), mRNA	
1218	11126	20976	3.35	1.0E-123	4953818	NT	Homo sapiens phosphatidylethanolamine N-acetylglucosaminide acetyltransferase (PENAT), mRNA, and translated products	
1218	11126	20977	3.35	1.0E-123	4650918	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products	
1430	11344	21211	1.76	1.0E-123	AJ388641.1	NT	Homo sapiens paraff mRNA for immunoglobulin kappa chain variable region (IGV/K gene), sample GNC2	
2052	11942	21837	2.98	1.0E-123	NM5419.1	NT	Human amilogenin (AMELY) gene, 3' end of cds	
2052	11942	21838	2.98	1.0E-123	NM5419.1	NT	Human amilogenin (AMELY) gene, 3' end of cds	
2052	11942	21839	2.98	1.0E-123	NM5419.1	NT	Human amilogenin (AMELY) gene, 3' end of cds	
2297	12151		4.6	1.0E-123	770962	NT	Homo sapiens Rab3-like GTP-binding protein (Rab3BP), gene, complete cds	
5344	15265	25031	1.75	1.0E-123	L3219.1	NT	Homo sapiens retinol-dehydrogenase-binding protein (CRALBP), gene, complete cds	
5344	15265	25032	1.76	1.0E-123	L3219.1	NT	Homo sapiens retinol-dehydrogenase-binding protein (CRALBP), gene, complete cds	
5425	15345	26440	1.29	1.0E-123	BE597465.1	EST_HUMAN	601569108-1 NH_JAK2, 70 Homo sapiens cDNA clone [IMAGE:38648433.5]	
5683	15799	26263	2.27	1.0E-123	AJ118455.1	EST_HUMAN	AJ118455-1 NH_JAK2, 100 Homo sapiens cDNA clone [IMAGE:1003491.5]	
6168	16071	26221	1.3	1.0E-123	LA2224.1	NT	Human growth hormone releasing hormone releasing hormone gene, exon 7	
6509	16398	26545	1.95	1.0E-123	BE253001.1	EST_HUMAN	601152818-1 NH_JAK2, 19 Homo sapiens cDNA clone [IMAGE:3569162.5]	
7392	17510	27157	4.14	1.0E-123	AJ3007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds	

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Table 1

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Probe SEQ ID NO:	Exon ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7471	17331	27537	12.23	1.0E-123	U9823.1	NT
86538	18765	29037	5	1.0E-123	Bf877282.1	EST_HUMAN
86538	18765	29038	5	1.0E-123	Bf877282.1	EST_HUMAN
268	10233	20509	1.1	1.0E-124	4501750	NT
268	10233	20549	1.1	1.0E-124	4501750	NT
273	10239	20238	1.98	1.0E-124	287675.1	NT
477	10421	20238	2.11	1.0E-124	AL16246.2	NT
676	10069	20426	2.03	1.0E-124	AAG9755.1	EST_HUMAN
676	10069	20430	2.03	1.0E-124	AAG9755.1	EST_HUMAN
742	10673	20509	3.67	1.0E-124	AF59854.1	NT
791	10720	20561	1.06	1.0E-124	4691750	NT
889	10812	20660	1.81	1.0E-124	770346	NT
1283	11200	21056	2.59	1.0E-124	11410902	NT
1324	11231	21086	5.54	1.0E-124	AF2774892.1	Hom sapiens glucose transporter 3 gene, exons 8, 10, and complete cds
1324	11231	21087	5.54	1.0E-124	AF2774892.1	Hom sapiens glucose transporter 3 gene, exons 8, 10, and complete cds
1173	11072	21530	2.35	1.0E-124	AB31712.1	NT
2016	11007	21787	2.23	1.0E-124	BE876524.1	EST_HUMAN
2408	12285	22152	0.85	1.0E-124	AB24096.1	NT
3319	13240	23045	0.85	1.0E-124	4804116	Hom sapiens glutamate receptor, ionotropic, kindt 1 (GRIN1) mRNA
3446	13363	23160	0.06	1.0E-124	S76634.1	Hom sapiens ATP-sensitive inward rectifying K-channel subunit (KCNJ6BIR1) gene, exon 1
3446	13363	23170	0.96	1.0E-124	S76634.1	Hom sapiens ATP-sensitive inward rectifying K-channel subunit (KCNJ6BIR1) gene, exon 1
3968	13912	23300	2.95	1.0E-124	X3714.1	Hom sapiens lactate dehydrogenase B gene (exon 1 and 2 (E1-1.27) (and joined CDS))
3825	13737	23526	1.09	1.0E-124	4607500	NT
3983	13890	23696	1.19	1.0E-124	4804116	Hom sapiens T-cell lymphoma invasion and metastasis 1 (Tiam1) mRNA
4639	14827	24315	1.56	1.0E-124	AB224066.1	Hom sapiens gene for B-126, exon 11
4850	14731	24500	1.12	1.0E-124	M16178.1	Human fibronectin gene, exon 11 (part of EFL1), exon 1x1
5039	14911	24685	2.72	1.0E-124	AI204639.1	NAT_HUMAN
5240	15164	24934	8.97	1.0E-124	8822337	Hom sapiens hypothetical protein FLJ10300 (FLJ10300) mRNA
5560	15503	25580	6.43	1.0E-124	BF590315.1	602124644F1_NH_MOC_56_Homo_sapiens_CDNA_clone_MAGE-1281655' 5'
6185	16070	26220	3.31	1.0E-124	Y1177.1	N_musculus mRNA for fos gene
6805	16884	26874	5.06	1.0E-124	4806854	Hom sapiens fibronectin protein 5 (RF5) mRNA

Single Exon Probes Expressed In Heart
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Probe	Exon	ORF SEQ ID NO:	ORF SEQ ID NO:	Expression Signal ID No:	Most Similar BLAST E Value	(Top) Hit	Top Hit Assessment No.	Top Hit Database Source	Top Hit Description
6930	13908	27052	1.35	1.0E-124	AIV/012106.1	EST_HUMAN	hg94499_x1_NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:Q096162		
6930	16808	27003	1.35	1.0E-124	AIV/012106.1	EST_HUMAN	hg94499_x1_NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:Q096162		
7468	17238	27573	2.44	1.0E-124	AIV/012106.1	EST_HUMAN	hg94499_x1_NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:Q096162		
7465	17326	27553	2.44	1.0E-124	AIV/012106.1	EST_HUMAN	hg94499_x1_NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:Q096162		
7542	17393	27805	7.8	1.0E-124	AIV/012106.1	EST_HUMAN	hg94499_x1_NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:Q096162		
7542	17393	27805	7.8	1.0E-124	AIV/012106.1	EST_HUMAN	hg94499_x1_NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:Q096162		
8404	18260	27152	1.25	1.0E-124	AIV/012106.1	EST_HUMAN	hg94499_x1_NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:Q096162		
8404	18260	27152	1.25	1.0E-124	AIV/012106.1	EST_HUMAN	hg94499_x1_NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:Q096162		
8845	18509	28708	2.25	1.0E-124	AIV/012106.1	EST_HUMAN	hg94499_x1_NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:Q096162		
8767	17916	28192	1.87	1.0E-124	AIV/012106.1	EST_HUMAN	hg94499_x1_NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:Q096162		
8767	17616	28183	1.87	1.0E-124	AIV/012106.1	EST_HUMAN	hg94499_x1_NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:Q096162		
9173	10009	20459	3.98	1.0E-124	AAS/97551.1	EST_HUMAN	ZB1604.1 Strategene zebrafish brain S11 Homo sapiens cDNA clone IMAGE:287110 5' similar to TR:G3040482		
9173	10009	20450	3.98	1.0E-124	AAS/97551.1	EST_HUMAN	ZB1604.1 Strategene zebrafish brain S11 Homo sapiens cDNA clone IMAGE:287110 5' similar to TR:G3040482		
9846	19220	28005	1.99	1.0E-124	AAS/97551.1	EST_HUMAN	G3040482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETRON ELEMENT); Homo sapiens cation/neuraminidase binding protein (KIAA0330) mRNA		
9846	19828	28006	1.99	1.0E-124	AAS/97551.1	EST_HUMAN	Homo sapiens cation/neuraminidase binding protein (KIAA0330) mRNA		
316	10278	5.41	1.0E-125	AII/032398.1	EST_HUMAN	Homo sapiens mRNA for KIAA1172 protein, partial cds			
420	9897	19778	3.92	1.0E-125	AII/032398.1	EST_HUMAN	Homo sapiens mRNA for KIAA1172 protein, partial cds		
628	10665	20377	1.63	1.0E-125	AII/06565.1	EST_HUMAN	Homo sapiens mRNA for KIAA1172 protein, partial cds		
628	10655	20376	1.63	1.0E-125	AII/06565.1	EST_HUMAN	Homo sapiens mRNA for KIAA1172 protein, partial cds		
711	10643	20469	1.24	1.0E-125	AII/06565.1	EST_HUMAN	Homo sapiens mRNA for KIAA1172 protein, partial cds		
8442	10769	20619	2.13	1.0E-125	AAD/02813.1	EST_HUMAN	Z63507.1 Scares, program, uterus. Non-H-U Homo sapiens cDNA clone IMAGE:486540 3' similar to hg38/9865 5'		
8442	10605	20790	1.53	1.0E-125	AII/065210.2	EST_HUMAN	Homo sapiens chromosome 21 segment H16P21_2010		
1133	10650	20890	1.65	1.0E-125	AII/065210.2	EST_HUMAN	Homo sapiens chromosome 21 segment H16P21_2010		
1849	12700	21441	1.08	1.0E-125	AII/015490.1	EST_HUMAN	KIAA0292 gene product; KIAA0292, mRNA		
1769	11668	21545	3.81	1.0E-125	AII/015490.1	EST_HUMAN	Homo sapiens Usp19-like mRNA, complete cds		
1769	11668	21546	3.81	1.0E-125	AII/015490.1	EST_HUMAN	Homo sapiens Usp19-like mRNA, complete cds		

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Probe Seq ID No:	ORF Seq ID No:	Exon Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description:
2455	12832	22228	1.15	1.0E-125	AA042813.1	EST_HUMAN	Zf53c07_1.5 Soares, pregnant uterus_NiblPU Homo sapiens cDNA clone IMAGE:4885403 similar to gb:X65857, cd041 OLFACTORY RECEPTOR-LIKE PROTEIN 1 (HUMAN)
2551	12424	22315	1.65	1.0E-125	450e46866_NT	Homologous proteins: fibulin, spinophilin (HsA) mRNA	
2551	12424	22316	1.65	1.0E-125	450e46866_NT	Homologous proteins: fibulin, spinophilin (HsA) mRNA	
2655	12427	22320	2.46	1.0E-125	AI/329461.1	EST_HUMAN	alpha4beta2(NC_0010425 NC1_CGAP_1.55 Homo sapiens cDNA clone IMAGE:1471719 3 mRNA
4450	14344	24136	1.98	1.0E-125	112425141_NT	Homologous proteins: zinc finger protein ZNF287 (ZNF287), mRNA	
4450	14344	24137	1.98	1.0E-125	111231141_NT	Homologous proteins: zinc finger protein ZNF287 (ZNF287), mRNA	
4516	14408	24195	0.84	1.0E-125	BE515412.1	EST_HUMAN	Homo sapiens KIAA0081 protein (KIAA0081), mRNA
5891	15498	24953	1.41	1.0E-125	114194868_NT	Homologous proteins: KIAA0081 protein (KIAA0081), mRNA	
5891	15498	24957	3.44	1.0E-125	BE562260.1	EST_HUMAN	601143541271 NIH_3T3; 72H Horro hepatocytes cDNA clone IMAGE:3916892 6 mRNA
5895	15870	25963	1.48	1.0E-125	BE562261.1	EST_HUMAN	(60113398268F1 NIH_3T3; 44H Horro hepatocytes cDNA clone IMAGE:3889790 6 mRNA
5895	15870	25964	1.48	1.0E-125	BE562262.1	EST_HUMAN	(60113398268F1 NIH_3T3; 44H Horro hepatocytes cDNA clone IMAGE:3889790 6 mRNA
6201	15981	26093	6.36	1.0E-125	X05427.1	NT	Homologous genes: exon 5
6201	15981	26094	6.36	1.0E-125	X05427.1	NT	Homologous genes: exon 5
6674	16851	27043	1.22	1.0E-125	U66288.1	NT	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
6674	16851	27044	1.22	1.0E-125	U66288.1	NT	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
7272	17149	27343	4.31	1.0E-125	BE181040.1	EST_HUMAN	Q01-HT0638-070500-191-472 HT0638 Homo sapiens cDNA
7272	17149	27344	4.31	1.0E-125	BE181040.1	EST_HUMAN	Q01-HT0638-070500-191-472 HT0638 Homo sapiens cDNA
8009	17860	28211	3.15	1.0E-125	AF045498.1	NT	Homologous proteins: LRE1 gene, exon 5
8152	18040	28229	1.96	1.0E-125	AW131202.1	EST_HUMAN	v15002-x1 NCI_OGAP_Gata4 Homo sapiens cDNA clone IMAGE:2622365 3 similar to TR-Q13284 Q13284
8152	18040	28230	1.86	1.0E-125	AW131202.1	EST_HUMAN	LAMBDA10/TA1 PROTEIN KINASE C-INTERACTING PROTEIN, [1];
8478	18351	28616	5.13	1.0E-125	AB014587.1	EST_HUMAN	LAMBDA10/TA1 PROTEIN KINASE C-INTERACTING PROTEIN, [1];
8609	18476	28716	2.92	1.0E-125	70858065_NT	Homologous proteins: heavy polymeric actin (HAT1), mRNA	
8615	18482	28754	5.16	1.0E-125	AF028093.1	NT	Homologous proteins: p44 binding protein II (P4BP2) gene, complete cds
8733	18522	28804	2.49	1.0E-125	AW131200.1	EST_HUMAN	xf5902x1 NCI_OGAP_Gata4 Homo sapiens cDNA
8733	18522	28807	4.36	1.0E-125	BE074287.1	EST_HUMAN	CV5-B10569-020200-075-900 ST10569 Homo sapiens cDNA
8733	18522	28807	4.36	1.0E-125	BE074287.1	EST_HUMAN	CV5-B10569-020200-075-900 ST10569 Homo sapiens cDNA
8943	18749	28941	1.98	1.0E-125	AB014587.1	NT	Homologous mRNA for KIAA0867 protein, partial cds
757	10487	20525	0.88	1.0E-126	4756007_NT	Homologous genes: CLK kinase (CLK)-mRNA	
760	10690	20528	1.2	1.0E-126	ME868.1	NT	Human limbkin B1 chain gene, exon 20

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
901	10820	20670	2.05	1.0E-126	X687956.1	NT	H. sapiens gene for alpha 1-anti-chymotrypsin, exon 3
2652	12025	22317	2.24	1.0E-126	6382078.1	NT	Homo sapiens FAN binding protein 2 (RANBP2), mRNA
9335	12988	22773	6.07	1.0E-126	AA169709.1	EST; HUMAN	27-27203-1 Stratelene pancreas (S077206) Homo sapiens cDNA clone MAGE:592420 5'
3035	12963	22778	6.07	1.0E-126	AA169709.1	EST; HUMAN	27-27203-1 Stratelene pancreas (S077206) Homo sapiens cDNA clone MAGE:592420 5'
3677	13491	23238	1.21	1.0E-126	X68941.1	NT	H. sapiens gene for liver cytochrome b5 reductase 65 pseudogene
3605	13510	23307	2.04	1.0E-126	7657508.1	NT	Homo sapiens death receptor 6 (DR6), mRNA
4677	14693	24356	0.95	1.0E-126	AF010108.1	NT	Homo sapiens collagen type XI alpha-1 (COL11A1) gene, exon 33
4677	14693	24357	0.95	1.0E-126	AF010108.1	NT	Homo sapiens collagen type XI alpha-1 (COL11A1) gene, exon 33
4728	14614	24400	1.57	1.0E-126	C30078.1	NT	27-27203-1 Stratelene testis (S077206) Homo sapiens cDNA clone MAGE:592444 5' similar to zZ65403.1 Scores=total 100.0, total 100.0, Nt25-PR, SIV Homo sapiens cDNA clone MAGE:798444 5' similar to T7G1149890. G1149880 TITIN;
5779	15686	28705	3.68	1.0E-126	AA1698075.1	EST; HUMAN	Homo sapiens mRNA for KIAA0525 protein, partial cds
5797	15700	28913	3.82	1.0E-126	AB049098.1	NT	Homo sapiens mRNA for KIAA0525 protein, partial cds
5797	15703	28314	3.82	1.0E-126	AB049098.1	NT	Homo sapiens mRNA for KIAA0525 protein, partial cds
6660	16540	267937	2.77	1.0E-126	X68019.1	NT	Human mRNA for alayn (variant 2.1)
8223	18141	28336	1.95	1.0E-126	BF885175.1	EST; HUMAN	60213913871 NIH_3T3, 46 Homo sapiens cDNA clone MAGE:5928240 5'
8805	18620	28610	2.41	1.0E-126	BB261680.1	EST; HUMAN	60114694041 NIH_3T3, 46 Homo sapiens cDNA clone MAGE:5925129 5'
6698	24890	4.38	1.0E-126	BF748922.1	EST; HUMAN	601577961F1 NIH_3T3, 9 Homo sapiens cDNA clone MAGE:3229885 5'	
165	10138	19854	3.59	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for caspase-1 epsilon, complete cds
165	10138	19865	3.59	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for caspase-1 epsilon, complete cds
168	10138	19854	2.31	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for caspase-1 epsilon, complete cds
168	10138	19855	2.31	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for caspase-1 epsilon, complete cds
272	10249	20355	2.35	1.0E-127	C87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
272	10248	20057	2.35	1.0E-127	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
863	10789	20640	1.32	1.0E-127	AF114488.1	NT	Homo sapiens interacid short leucine (ISL) mRNA, complete cds
808	10823	20659	1.28	1.0E-127	U72021.2	NT	Homo sapiens lost on transformation L07 mRNA, complete cds
1665	11567	21433	0.98	1.0E-127	49227053.1	NT	Homo sapiens ubiquitin specific protease B (USPB) mRNA
2020	11911	21810	1.59	1.0E-127	5809065.1	NT	Homo sapiens leukocyte immunoglobulin like receptor, sulfatase 1 (with TM domain), member 1 (LILRA1), mRNA
2020	11811	21801	1.59	1.0E-127	5809065.1	NT	Homo sapiens leukocyte immunoglobulin like receptor, sulfatase 1 (with TM domain), member 1 (LILRA1), mRNA
2163	12041	21619	7.45	1.0E-127	48609620.1	NT	Homo sapiens ribosomal protein L26 (RPL26) mRNA
2294	12176	22076	4.01	1.0E-127	AF245605.1	NT	Homo sapiens effector mRNA, complete cds
2566	12437	22330	2.78	1.0E-127	X12881.1	NT	Human mRNA for orfakalin-18
2579	12460	22341	0.98	1.0E-127	AA450131.1	EST; HUMAN	242-2d2.1 Score: 100.0, total 100.0, Nt25-PR, SIV Homo sapiens cDNA clone MAGE:785985 5'

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Probe Seq ID No.	Exon Seq ID No:	ORF Seq ID No:	Expression Signal Value	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
2579	12450	22342	0.96	1.0E-127	AA4650131.1	EST_HUMAN	Zn262021.1 Scores: 1001 Jellus, 1001 Homo sapiens cDNA clone IMAGE:7696985 similar to <i>au18608.v1</i> Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2728584 5' similar to TRD1510_015170 TRANSCRIPTION FACTOR SII-RELATED PROTEIN IN; contains element MER22 repetitive element;
3740	13952	23435	0.86	1.0E-127	AV151207.1	EST_HUMAN	Homo sapiens delayed rectifier potassium channel subunit 1 (Kv4.1) mRNA, complete cds
4026	13829	23706	1.09	1.0E-127	AF135188.1	NT	Homo sapiens chromosome 21 segment HS21C047
4128	14028	23802	0.86	1.0E-127	AL165247.2	NT	Homo sapiens neurokinin-1-amidated protein (LOC51564) mRNA
4160	14060	28533	21.46	1.0E-127	7700239	NT	Homo sapiens cytoskeleton-associated protein P450RA-2 mRNA, complete cds
4160	14060	28534	21.46	1.0E-127	7700239	NT	Homo sapiens cytoskeleton-associated protein P450RA-2 mRNA, complete cds
4396	14261	24073	0.92	1.0E-127	AF12625207.1	NT	Homo sapiens R4D1 (S. pombe) homolog (R4D1) mRNA, and translated products
4499	14993	24178	4.16	1.0E-127	45003834	NT	Homo sapiens chromosome 21 segment HS21C046B
4632	14425	193	1.93	1.0E-127	AL165268.2	NT	Homo sapiens R4D1 (S. pombe) homolog (R4D1) mRNA, and translated products
4675	14465	24232	0.68	1.0E-127	6612659	NT	Homo sapiens R4D1 (S. pombe) homolog (R4D1) mRNA, and translated products
6846	14662	26533	3.72	1.0E-127	Y55754.1	NT	H. sapiens NO2 gene, exon 6
5712	15650	26737	2.67	1.0E-127	XK4050.1	NT	H. sapiens TCF11 genes, exon 3-6
5810	15722	28355	6.76	1.0E-127	4504778	NT	Homo sapiens integrin, beta 1 (ITGB3) mRNA
6578	16436	28620	1.38	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS) mRNA
6578	16436	28621	1.38	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS) mRNA
7658	17409	27624	4.97	1.0E-127	A274863.1	NT	Homo sapiens secretory pathway component Sec61B-1 mRNA, alternatively spliced, complete cds
7658	17409	27625	4.97	1.0E-127	A274863.1	NT	Homo sapiens secretory pathway component Sec61B-1 mRNA, alternatively spliced, complete cds
7823	17773	26012	1.17	1.0E-127	1412226	NT	Homo sapiens Chielo-1-like syntaxone 1 (CHS1) mRNA
8468	18571	28654	6.74	1.0E-127	11417359	NT	Homo sapiens similar to heat shock 70kD protein 68 (Heatshock-2) H. sapiens (LOC63184) mRNA
8468	18571	28655	6.74	1.0E-127	11417359	NT	Homo sapiens similar to heat shock 70kD protein 68 (Heatshock-2) H. sapiens (LOC63184) mRNA
8656	18707	25001	2.46	1.0E-127	BE389456.1	EST_HUMAN	6014347464-F1 NIH3T3 MGCG-72 Homo sapiens cDNA clone IMAGE:3919617 5
8896	18707	25002	2.46	1.0E-127	BE389456.1	EST_HUMAN	6014347464-F1 NIH3T3 MGCG-72 Homo sapiens cDNA clone IMAGE:3919617 5
9397	10138	19854	1.06	1.0E-127	AB204567.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
9397	10138	19855	1.06	1.0E-127	AB204567.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
9395	19177	26279	2.1	1.0E-127	AB011399.1	EST_HUMAN	F01278127-F1 AB011399.1 mRNA
4452	10396	20214	4.46	1.0E-128	BE389457	NT	Homo sapiens chromosome 21 (ver3) (C3orf62) mRNA
1139	11052	20892	1.48	1.0E-128	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (ver3) (C3orf62) mRNA
1139	11052	20893	1.48	1.0E-128	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (ver3) (C3orf62) mRNA
2026	11916	21005	12.19	1.0E-128	U2523.1	NT	Human FA1HP pseudogene, truncated repeat regions
2026	11916	21006	12.19	1.0E-128	U2523.1	NT	Human FA1HP pseudogene, truncated repeat regions

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Probe Seq ID No:	ORF Seq ID No:	Exon Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Assessment No.	Top Hit Database Source	Top Hit Descriptor	Homo sapiens ribosomal protein S2 (RPS2) mRNA
2162	12349	21930	13.3	1.5E-128	4050718	NT		
2295	12273		0.85	1.0E-128	11431465	NT		Homo sapiens chromatin-associated elongation factor 140 kDa subunit (FA-CTP140), mRNA
3348	13268	20071	1.13	1.0E-128	AB235073.1	NT		Homo sapiens mRNA for KIAA2347 protein, partial cds
4055	14457	24245	5.46	1.0E-128	11428673	NT		Homo sapiens proprotein-converting enzyme 1 (PROX1), mRNA
5905	15770	23850	2.07	1.0E-128	11429605	NT		Homo sapiens phosphodiesterase 1C (cAMP-dependent (PKD1) (PDE1C)), mRNA
6140	15988	26123	7.23	1.0E-128	BF221345.1	EST_HUMAN		7q26.1(11p11.1) NCI CGAP L224 Homo sapiens cDNA clone IMAGE 3'
6276	16853	27046	3.28	1.0E-128	AB007923.1	NT		Homo sapiens mRNA for KIAA0454 protein, partial cds
6670	16985	27047	3.28	1.0E-128	AB007923.1	NT		Homo sapiens mRNA for KIAA0454 protein, partial cds
7834	17884	27023	1.25	1.0E-128	AAA638198.1	EST_HUMAN		11q11.1-11q12.1 NCI CGAP Ew1 Homo sapiens cDNA clone IMAGE 1182620 similar to TR-G851388 G851338
8092	17983	28232	5.94	1.0E-128	11425254	NT		CHROMOSOME SEGREGATION GENE HOMOLOG CAs ;
8101	17991	28240	3.87	1.0E-128	AA020965.1	EST_HUMAN		Homo sapiens glutamate receptor, ionotropic, N-methyl-D-aspartate 2D (GRIN2D), mRNA
8220	18111	28354	1.79	1.0E-128	BE394475.1	EST_HUMAN		condB08 et al NCI CGAP GRCA4 Homo sapiens cDNA clone IMAGE 11552638 3' similar to gb X54541 CYCLIN-
9263	18688	10353	3.68	1.0E-128	AW685950.1	EST_HUMAN		60/277858/1 NIH 3T3C-20 Homo sapiens cDNA clone IMAGE 3618750 5'
407	10353	20162	2.19	1.0E-129	S37722.1	NT		insulin-like growth factor binding protein-2(Human, placenta, Genomic, 1019 nt, segment 2 of 4)
1859	11651	21461	1.36	1.0E-129	S37722.1	NT		insulin-like growth factor binding protein-2(Human, placenta, Genomic, 1019 nt, segment 2 of 4)
1863	11656	21465	2.29	1.0E-129	ALU9890.1	NT		Novel human mRNA containing Zinc finger C2H2-type domains
1863	11656	21468	2.29	1.0E-129	AF240786.1	NT		Homo sapiens glutathione S-transferase theta 1 (GSTT1) gene, complete cds
1863	11656	21468	2.29	1.0E-129	AF240786.1	NT		Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1862	11659	21515	2.43	1.0E-129	11419522	NT		Homo sapiens zinc finger protein 70 (expressed in testes) (ZNF70), mRNA
2761	12613	22503	1.19	1.0E-129	48006822	NT		Homo sapiens platelet-derived growth factor receptor, beta polypeptide (PDGFRB), mRNA
3059	13016	22805	1.35	1.0E-129	Q14595	SWISSPROT	ZINC FINGER PROTEIN HFZ10	
3059	13016	22809	1.35	1.0E-129	Q14595	SWISSPROT	ZINC FINGER PROTEIN HFZ10	
4073	13975	23754	2.2	1.0E-129	AB049862.1	NT		Homo sapiens mRNA for KIAA459 protein, partial cds
4183	14083	23856	8.7	1.0E-129	AW592544.1	EST_HUMAN		CNVA Human cardiac muscle expression library Homo sapiens cDNA clones 4151835 similar to CNVA5
4183	14083	23857	9.7	1.0E-129	AW752544.1	EST_HUMAN		CNVA Human cardiac muscle expression library Homo sapiens cDNA clone 4151835 similar to CNVA5

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descripts	
							Top Hit Descripts	
6708	18164	25715	2.90	1.0E-129	AJ006345.1	NT	Homo sapiens KvLQT1 gene	
6229	16996	26245	5.17	1.0E-129	AJ006345.1	NT	Homo sapiens KvLQT1 gene	
6287	15132	25269	7.56	1.0E-129	AB014634.1	NT	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC053594), mRNA	
6841	16726	3.68	1.0E-129	AB014634.1	NT	Homo sapiens mRNA for LRRK2 (LOC053594), partial cds		
8554	16424	28693	3.52	1.0E-129	AJ626526.1	EST_HUMAN	67/20/11 Score: 73.99/PU_S1 Homo sapiens cDNA clone [MAGE1] (T047585 5'	
8618	16139	26289	9.4	1.0E-129	AJ006345.1	NT	similar to ribosomal protein S26 (H. sapiens) (LOC053594), mRNA	
18699	28693	2.04	1.0E-129	AJ143151.1	EST_HUMAN	AU143151/Y79AAT Homo sapiens cDNA clone YT9AA10014105 5'		
8858	16896	28694	2.04	1.0E-129	AJ143151.1	EST_HUMAN	AU143151/Y79AAT Homo sapiens cDNA clone YT9AA10014105 5'	
9230	18690		1.87	1.0E-129	AB31165.1	EST_HUMAN	SP_848150_B18150_HB-25-HIBERNATION-RELATED PROTEIN - TAMAS ASATIUS<ASIAN>	
9850	19203		1.88	1.0E-129	AB120384.1	EST_HUMAN	DK270282/171 17/782 (synonym: hmlm2) Homo sapiens cDNA clone DK270282/171 5'	
1643	11547	21408	0.81	1.0E-130	BB1275192.1	EST_HUMAN	60/12/1895EF_NIH MGC_20 Homo sapiens cDNA clone MAGE_340386 5'	
1643	11547	21409	6.81	1.0E-130	BB1275192.1	EST_HUMAN	60/12/1895EF_NIH MGC_20 Homo sapiens cDNA clone MAGE_340386 5'	
1940	11655		2.06	1.0E-130	X04092.1	NT	Human gene for catalase (EC 1.1.1.6) spans 9 mapping to chromosome 11, band p13	
2743	12805		7.77	1.0E-130	AJ02030.1	NT	Homo sapiens RET finger protein-like 1 (kinase transcr.), partial	
2849	12777	22684	1.1	1.0E-130	BB1275192.1	EST_HUMAN	60/12/1895EF_NIH MGC_20 Homo sapiens cDNA clone MAGE_340386 5'	
2849	12777	22685	1.1	1.0E-130	BB1275192.1	EST_HUMAN	60/12/1895EF_NIH MGC_20 Homo sapiens cDNA clone MAGE_340386 5'	
3650	13446	23245	1.07	1.0E-130	AB246898.1	NT	Homo sapiens refined fibroblastome homolog system-(fDHS) mRNA, complete cds	
3703	12777	22684	4.77	1.0E-130	BB1275192.1	EST_HUMAN	60/12/1895EF_NIH MGC_20 Homo sapiens cDNA clone MAGE_340386 5'	
3703	12777	22685	4.77	1.0E-130	BB1275192.1	EST_HUMAN	60/12/1895EF_NIH MGC_20 Homo sapiens cDNA clone MAGE_340386 5'	
3857	13788	23580	1.09	1.0E-130	AB033860.1	EST_HUMAN	GU11-EBN0-akv-9-0-JUL1 NIH MGC_30 Homo sapiens cDNA clone MAGE_3078731 5'	
4458	14533	24122	7.48	1.0E-130	ABV843985.1	EST_HUMAN	GU4-2N0048-18/200-51-102 GU0048/Homo sapiens cDNA	
6026	14902	24973	1.09	1.0E-130	ABV843985.1	EST_HUMAN	ICG-C/T0318-201193/03-7411 C70318/Homo sapiens cDNA	
6026	14902	24974	1.09	1.0E-130	ABV843985.1	EST_HUMAN	ICG-C/T0318-201193/03-7411 C70318/Homo sapiens cDNA	
6301	16166	28322	2.04	1.0E-130	ABV843985.1	EST_HUMAN	Homo sapiens scolopane carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA	
7119	16996	27187	2.45	1.0E-130	ABV843985.1	EST_HUMAN	EST388512/MAGE1, mRNA for KIAA1315, protein, partial cds	
7344	17150	27327	1.57	1.0E-130	AB037758.1	NT	Homo sapiens mRNA for KIAA1315, protein, partial cds	
8553	16395	28650	32.43	1.0E-130	M25140.1	NT	[human cardiac alpha 1 myosin heavy chain (MHC) genes, exons 2, 3 and 4]	
4	66971	19782	2.46	0.1E+00	AAT278125.1	EST_HUMAN	GZ556411 Score: 759/PU_S1 Homo sapiens cDNA clone [MAGE1] (T047585 5' similar to IR/G22281/1	
4	66971	19783	2.49	0.1E+00	AAT278125.1	EST_HUMAN	GZ556411 Score: 759/PU_S1 Homo sapiens cDNA clone [MAGE1] (T047585 5' similar to IR/G22281/1	
7	66973	19785	1.44	0.1E+00	4885136.1	NT	Homo sapiens chordin-like suppressor [(CHES1), mRNA	

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF Seq ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Acession No.	Top Hit Database Source	Top Hit Descriptor
15	10001	19792	1.34	0.0E+00	8923346	NT	Homo sapiens hypothetical protein FLJ_20371 (FLJ_20371), mRNA
16	10001	19793	1.34	0.0E+00	8923349	NT	Homo sapiens hypothetical protein FLJ_20371 (FLJ_20371), mRNA
20	10007	19798	2.45	0.0E+00	DS5327.1	NT	Homo sapiens DCRP1 mRNA, partial cds
20	10007	19800	2.16	0.0E+00	DS5327.1	NT	Homo sapiens DCRP1 mRNA, partial cds
24	10011	19804	6.67	0.0E+00	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
33	10020	19818	0.97	0.0E+00	MS8600.1	NT	Human hepatitis eotaxin (H-1c) gene, exons 1 through 6
36	10022	19819	2.41	0.0E+00	6857825	NT	Homo sapiens RNA-binding protein S1, serine-rich domain (RNP1), mRNA
61	10038	19846	1.4	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multifung resistance protein 3 (ABCC3)
61	10038	19846	1.4	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multifung resistance protein 3 (ABCC3)
62	10039	19847	1.22	0.0E+00	D78804.1	EST_HUMAN	HUM5781-BB Human placenta polypeptide-(T Fujiiwa) Homo sapiens cDNA clone GEN-5167-08 6
62	10039	19848	1.22	0.0E+00	D78804.1	EST_HUMAN	HUM5781-BB Human placenta polypeptide-(T Fujiiwa) Homo sapiens cDNA clone GEN-5167-08 6
63	10040	19849	4.14	0.0E+00	L16568.1	NT	Human ribosomal protein L7 (RP-L7) mRNA, complete cds
65	10042	19852	8.1	0.0E+00	AV098634.1	EST_HUMAN	or45e07_x1_hu bone marrow stroma (Homo sapiens cDNA clone HBMSC_2448e07_3'
65	10042	19853	8.1	0.0E+00	AV098634.1	EST_HUMAN	or45e07_x1_hu bone marrow stroma (Homo sapiens cDNA clone HBMSC_2448e07_3'
69	10045	19867	5.8	0.0E+00	MS86075.1	NT	Human von Willebrand factor pseudogene corresponding to exon 23 through 34
61	10047	19877	2.75	0.0E+00	MS86076.1	NT	Human von Willebrand factor pseudogene corresponding to exon 23 through 34
69	10054	19889	1.77	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type 23 (PTPN15) mRNA
69	10054	19890	1.77	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type 23 (PTPN15) mRNA
71	10054	19899	1.49	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type 23 (PTPN15) mRNA
71	10054	19970	1.49	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type 23 (PTPN15) mRNA
74	10058	19875	42.13	0.0E+00	AA95370.1	EST_HUMAN	SW-TMCD_HUMAN_282829 TROPOMODULIN :
76	10060	19877	1.08	0.0E+00	4501650	NT	Homo sapiens amidopeptidase binding protein 1 (aminopeptidase (copper-containing)) (APB1), nuclear gene encoding mitochondrial protein, mRNA
77	10061	19886	14.77	0.0E+00	4501444	NT	Homo sapiens heterogenous nuclear ribonucleoprotein A1 (HNRNPA1) mRNA
86	10070	19886	47.56	0.0E+00	5010988	NT	Homo sapiens actin, beta (ACTB) mRNA
89	10073	19889	13.39	0.0E+00	U89277.1	NT	Human polycomb gene 1 homolog (NPHT1) mRNA, partial cds
94	10179	19895	1.46	0.0E+00	AF114743.1	EST_HUMAN	HA347_Human new cDNA library Homo sapiens cDNA
95	10085	19896	1.03	0.0E+00	AB037784.1	NT	Homo sapiens mRNA for KIF4A (36S protein, partial cds
102	10086	19897	6.13	0.0E+00	X671213.1	NT	H_sapiens_nox gene (exon 2)
110	10091	19898	1.39	0.0E+00	AB23701.1	EST_HUMAN	fca38051_NCL_CGAP_Hu Homo sapiens cDNA clone IMAGE22760833 3' similar to TR_Q99551 Q98651 MITOCHONDRIAL TRANSCRIPTION FACTOR PRECURSOR ;
111	10091	19898	1.88	0.0E+00	AB23701.1	EST_HUMAN	fca38051_NCL_CGAP_Hu Homo sapiens cDNA clone IMAGE22760833 3' similar to TR_Q99551 Q98651 MITOCHONDRIAL TRANSCRIPTION FACTOR PRECURSOR ;

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Probe SEQ ID No.	Exon SEQ ID No.	ORF SEQ ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
112	12636	19907	1.83	0.0E+00	N86040_1	EST_HUMAN	Y01169_01 Scores melanocyte 280cM. Homo sapiens cDNA clone MAGE:270017 5'
112	12636	19908	1.83	0.0E+00	N86040_1	EST_HUMAN	Y01169_01 Scores melanocyte 280cM. Homo sapiens cDNA clone MAGE:270017 5'
115	10954	19913	0.66	0.0E+00	4504528_N	NT	Homo sapiens neuropeptidase 2 (NPZP) mRNA
126	10100	19921	3.17	0.0E+00	4506209_NT	NT	Homo sapiens polymerase RNA, II (DNA-directed) polymerase A (220kDa) (POLR2A) mRNA
126	10100	19922	3.17	0.0E+00	4506208_NT	NT	Homo sapiens polymerase RNA, II (DNA-directed) polymerase B (200kDa) (POLR2B) mRNA
135	10108	19923	1.49	0.0E+00	T86945_1	EST_HUMAN	Homo sapiens fetal spleen (NS07205) Homo sapiens cDNA clone MAGE:08510 5'
135	10108	19930	1.49	0.0E+00	T86945_1	EST_HUMAN	Homo sapiens cDNA clone MAGE:08510 5'
147	10121	19942	9.05	0.0E+00	4504444_N	NT	Homo sapiens heterogenous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
151	10126	19942	2.42	0.0E+00	6014602_51_NIH_MGC_36 Human repetitive cDNA clone MAGE:360303 5'	NT	6014602_51_NIH_MGC_36 Human repetitive cDNA clone MAGE:360303 5'
153	10127	19946	15.84	0.0E+00	4504444_N	NT	Homo sapiens heterogenous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
166	10130	19946	1.36	0.0E+00	AF111168_2	NT	Homo sapiens esterase palmitoyl transferase 2 subunit 1 gene, complete cds; and unknown genes
168	10132	19947	1.1	0.0E+00	BE286973_1	EST_HUMAN	601174270F1_NIH_MGC_17 Homo sapiens cDNA clone MAGE:5529864 5'
159	10132	19947	1.18	0.0E+00	BE286973_1	EST_HUMAN	601174270F1_NIH_MGC_17 Homo sapiens cDNA clone MAGE:5529864 5'
160	10133	19948	2.99	0.0E+00	W73973_1	EST_HUMAN	2422051_1 Scores: 100% heart, heart_NA-H3V Homo sapiens cDNA clone IMAGE:2933954 5' similar to WF:Y5710A_2
161	10134	19949	1.51	0.0E+00	AF244088_1	NT	601410282_cds1 ZINC FINGER PROTEIN CLONE 647 (HUMAN); Homo sapiens zinc finger protein mRNA, complete cds
164	10137	19952	18.37	0.0E+00	AL165202_2	NT	Homo sapiens chromosome 21 segment 1S21C002
164	10137	19953	18.37	0.0E+00	AL165202_2	NT	Homo sapiens chromosome 21 segment 1S21C002
174	10145	19950	4.25	0.0E+00	BB678970_1	EST_HUMAN	bb24e12y1 NIH_VSG_14 Homo sapiens cDNA clone IMAGE:2683954 5' similar to WF:Y5710A_2
174	10145	19951	4.25	0.0E+00	BB678970_1	EST_HUMAN	CE22831_1; bb24e12y1 NIH_VSG_14 Homo sapiens cDNA clone IMAGE:2683954 5' similar to WF:Y5710A_2
179	10150	19954	1.98	0.0E+00	AB018327_1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
179	10150	19955	1.98	0.0E+00	AB018327_1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
187	10159	19957	130.42	0.0E+00	D80569_1	NT	Human gamma- δ -dihydroxy acid (ACT/Gf) pseudogene
182	10164	19981	2.83	0.0E+00	AF273045_1	NT	Homo sapiens CTCF tumor antigen ser14-3 mRNA, complete cds
182	10164	19982	2.83	0.0E+00	AF273045_1	NT	Homo sapiens CTCF tumor antigen ser14-3 mRNA, complete cds
194	10166	19984	2.92	0.0E+00	AF19714_1	NT	Homo sapiens chromosome XMS3-2 protein mRNA, complete cds
194	10166	19985	2.92	0.0E+00	AF19714_1	NT	Homo sapiens chromosome XMS3-2 protein mRNA, complete cds
203	12861	19981	9.33	0.0E+00	AI887308_1	EST_HUMAN	tg4R8_x1_NCL_CGAP_U3 Homo sapiens cDNA clone IMAGE:2207847 3' similar to gb:J03191 PROFLIN_1 (HUMAN); tg4R8_x1_NCL_CGAP_U3 Homo sapiens cDNA clone IMAGE:2207847 3' similar to gb:J03191 PROFLIN_1 (HUMAN)
203	12861	19982	9.33	0.0E+00	AI887308_1	EST_HUMAN	tg4R8_x1_NCL_CGAP_U3 Homo sapiens cDNA clone IMAGE:2207847 3' similar to gb:J03191 PROFLIN_1 (HUMAN); tg4R8_x1_NCL_CGAP_U3 Homo sapiens cDNA clone IMAGE:2207847 3' similar to gb:J03191 PROFLIN_1 (HUMAN)
205	10176	19984	1.94	0.0E+00	AF196568_1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds

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Probe Seq ID No.:	Exon Seq ID No.:	ORF Seq ID No.:	Expression Signal	Most Similar BLAST E Value:	Top Hit Acylation No.	Top Hit Database Source	Top Hit Descriptor	
208	10179	15.66	0.0E+00	4506352	NT	Human testis ribosomal protein L31 (RP31) mRNA		
209	10180	3.46	0.0E+00	AF132000.1	NT	Human testis TAD1 protein mRNA, complete cds		
215	10186	19.959	2.49	AB012624.1	NT	Human testis mRNA for KIAA0721 protein, partial cds		
216	10186	19.953	0.0E+00	AB516224.1	NT	Human testis mRNA for KIAA0721 protein, partial cds		
217	10187	20000	1.81	0.0E+00	6677344	NT	Mus musculus testis-specific protein, Y-encoded-like (Tsp1), mRNA	
224	10185	20004	3.43	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1/E46S Pediatric pre-B cell acute lymphoblastic leukemia Bayor+H/GSC project=TCBA Human testis cDNA clone TCBAP1/E46S	
224	10185	20005	3.43	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1/E46S Pediatric pre-B cell acute lymphoblastic leukemia Bayor+H/GSC project=TCBA Human testis cDNA clone TCBAP1/E46S	
224	10185	20006	3.43	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1/E46S Pediatric pre-B cell acute lymphoblastic leukemia Bayor+H/GSC project=TCBA Human testis cDNA clone TCBAP1/E46S	
225	10185	20004	3.99	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1/E46S Pediatric pre-B cell acute lymphoblastic leukemia Bayor+H/GSC project=TCBA Human testis cDNA clone TCBAP1/E46S	
225	10185	20005	3.99	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1/E46S Pediatric pre-B cell acute lymphoblastic leukemia Bayor+H/GSC project=TCBA Human testis cDNA clone TCBAP1/E46S	
225	10185	20006	3.99	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1/E46S Pediatric pre-B cell acute lymphoblastic leukemia Bayor+H/GSC project=TCBA Human testis cDNA clone TCBAP1/E46S	
226	10185	20004	12.62	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1/E46S Pediatric pre-B cell acute lymphoblastic leukemia Bayor+H/GSC project=TCBA Human testis cDNA clone TCBAP1/E46S	
226	10185	20005	12.62	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1/E46S Pediatric pre-B cell acute lymphoblastic leukemia Bayor+H/GSC project=TCBA Human testis cDNA clone TCBAP1/E46S	
226	10185	20006	12.62	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1/E46S Pediatric pre-B cell acute lymphoblastic leukemia Bayor+H/GSC project=TCBA Human testis cDNA clone TCBAP1/E46S	
238	10200	4.96	0.0E+00	5453805	NT	Human testes NS1-associated protein 7 (NSAP1) mRNA		
240	10208	6.54	0.0E+00	AL163201.2	NT	Human testes chromosome 21 segment (NS21C001)		
247	10213	20029	3.75	0.0E+00	AT231919.1	NT	Human testes chromosome 21 unknown mRNA	
249	10215	20032	1.46	0.0E+00	868772.1	NT	H. sapiens mRNA for interferon alpha/hepatitis receptor (long form)	
257	10223	6.81	0.0E+00	AF231919.1	NT	Human testes chromosome 21 unknown mRNA		
268	10234	20050	1.14	0.0E+00	4607500	NT	Human testes T-cell lymphoma invasion and metastasis 1 (TIA1/M1) mRNA	
269	10234	20051	1.14	0.0E+00	4607500	NT	Human testes T-cell lymphoma invasion and metastasis 1 (TIA1/M1) mRNA	
270	10235	20053	2.57	0.0E+00	770020B	NT	Human testes hypodermic protein (LOC125030), mRNA	
281	10246	20056	1.11	0.0E+00	D83227.1	NT	Human testes DCR1 mRNA, partial cds	
281	10246	20057	1.11	0.0E+00	D83227.1	NT	Human testes DCR1 mRNA, partial cds	
282	10247	0.86	0.0E+00	AW1845205.1	EST_HUMAN	12-C1(0031-0020-E03 C1(0031) Human testis cDNA		

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Probe Seq ID No:	Enz Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top LAST E Value)	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
381	10337	20161	2.04	0 OE+00	4850660 NT	Homo sapiens IgG fc binding protein (FcG GAMMA/BP) mRNA	
382	10338	20162	1.17	0 OE+00	4850660 NT	Homo sapiens IgG fc binding protein (FcG GAMMA/BP) mRNA	
383	10339	20163	1.64	0 OE+00	4850660 NT	Homo sapiens IgG fc binding protein (FcG GAMMA/BP) mRNA	
386	10339	20164	1.64	0 OE+00	4850660 NT	Homo sapiens IgG fc binding protein (FcG GAMMA/BP) mRNA	
394	10340	20165	2.43	0 OE+00	4850660 NT	Homo sapiens IgG fc binding protein (FcG GAMMA/BP) mRNA	
395	10341	20166	0.9	0 OE+00	4850660 NT	Homo sapiens IgG fc binding protein (FcG GAMMA/BP) mRNA	
396	10342	20167	0.84	0 OE+00	274870.1 NT	H.sapiens gene for RNA, pol II largest subunit, exons 23-29	
398	10342	20168	0.84	0 OE+00	274870.1 NT	H.sapiens gene for RNA, pol II largest subunit, exons 23-29	
403	10346	42008	0.06	0 OE+00	4850660 NT	Homo sapiens fibronectin protein 1 (FN1) (RBP19) mRNA	
414	98871	19772	1.31	0 OE+00	R17765.1 NT	ygdb@2.1 Soares infant brain (NIH-Homo sapiens cDNA clone IMAGE:31652.5'	
422	10367	20169	2.81	0 OE+00	4850728 NT	Homo sapiens fibronectin protein S (RPS5) mRNA	
423	10368	20170	2.42	0 OE+00	AB028942.1 NT	Homo sapiens fibronectin protein S (RPS5) mRNA	
424	10369	20161	4.7	0 OE+00	4857132 NT	Homo sapiens fibronectin protein S (RPS5) mRNA	
425	10369	20162	4.7	0 OE+00	4857132 NT	Homo sapiens fibronectin protein S (RPS5) mRNA	
425	10370	20163	3.51	0 OE+00	AF193607.1 NT	Mts musculis tonedin-SN protein (S6n) mRNA, complete cds	
438	10382	20206	2.01	0 OE+00	4857879 NT	Homo sapiens interferon gamma receptor 1 (IFGR1) mRNA	
443	10387	0.98	0 OE+00	AA323282.1	EST, HUMAN	EST 21054 Cebullin Homo sapiens cDNA clone IMAGE:3352346.5'	
444	10388	0.91	0 OE+00	BE254447.1	EST, HUMAN	601111520F1 NIH-MGC_16 Homo sapiens cDNA clone IMAGE:3352346.5'	
450	10404	20220	3.15	0 OE+00	4850552 NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTTR1B) mRNA	
460	10404	20221	3.16	0 OE+00	4850552 NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTTR1B) mRNA	
465	10408	20228	1.27	0 OE+00	4857897 NT	Homo sapiens Keratin 18 (KRT18) mRNA	
465	10408	20229	1.27	0 OE+00	4857897 NT	Homo sapiens Keratin 18 (KRT18) mRNA	
475	10419	20225	2.26	0 OE+00	AI462462.2 NT	Homo sapiens chromosome 21 segment HS21C06	
476	10420	20226	7.05	0 OE+00	AI462462.2 NT	Homo sapiens chromosome 21 segment HS21C06	
476	10420	20237	7.05	0 OE+00	AI462462.2 NT	Homo sapiens chromosome 21 segment HS21C06	
485	10420	20242	2.59	0 OE+00	AB032055.1 NT	Homo sapiens mRNA for KIAA209 protein, partial cds	
487	10430	20244	1.64	0 OE+00	AI32898.1 NT	ALU132898 NT2P4_Homo sapiens cDNA clone N12RF4000637.5'	
487	10430	20250	2.17	0 OE+00	4857857 NT	Novel human gene mapping to chromosome 1	
496	12653	20251	1.05	0 OE+00	AI485925.1 NT	RMD70685_13490-000-006 D70685_Homo sapiens cDNA	
498	10440	20253	1.07	0 OE+00	AI117233.1 NT	Novel human gene mapping to chromosome 1	
499	10441	20254	1.64	0 OE+00	8828065 NT	Homo sapiens PC2528 protein, mRNA	
508	10450	20263	3.91	0 OE+00	AI65210.2 NT	Homo sapiens chromosome 21 segment HS21C010	
515	12669	20267	1.97	0 OE+00	BE91527.1 NT	QY2-B70658_16490-42ch05_B16490-42ch05_Homo sapiens cDNA	
520	10462	20273	1.13	0 OE+00	BF25005.1 NT	6017685F1 NIH-MGC_53 Homo sapiens cDNA clone IMAGE:3369995.5'	

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Probe Seq ID No:	Exon Seq ID No:	CRF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
526	10468	20286	1.16	0.E+00	AED0509.1	NT	Human sapiens mRNA for KIAA1476 protein, partial cds
528	10471	20283	11.27	0.E+00	6000500 NT	Human sapiens transcription elongation factor B(SII), polypeptide 1-like (TCEB1) mRNA	
530	10472	20284	3.96	0.E+00	4500366 NT	Human sapiens gamma nucleic acid binding protein (G protein), alpha 11 (Gα class) (GNA11) mRNA	
530	10472	20285	3.96	0.E+00	46504566 NT	Human sapiens gamma nucleic acid binding protein (G protein), alpha 11 (Gα class) (GNA11) mRNA	
536	10477		5.78	0.E+00	AF003528.1	NT	Human sapiens X-linked antimicrobial ectodomain depeptidase protein gene (EDA), exon 2 and flanking repeat regions
541	10485	20206	1.79	0.E+00	AV135282.1	EST HUMAN	UHM-B1-act1-04-LU1-s1 NCI CGGP Sub3 Homo sapiens cDNA clone IMAGE-27395; 3'
554	10495		3.16	0.E+00	D10083.1	NT	Human sapiens RGM-1 gene, retrovirus-like element
571	10510	20318	2.66	0.E+00	5171472 NT	Human sapiens adenosine-cytidine kinase, kinase from sulfur polypeptide 1 (UDCCRFS1), nuclear gene encoding mitochondrial protein, mRNA	
684	10822		6.28	0.E+00	JQ4096.1	NT	Human apolipoprotein A-I (apoA-I) gene, exon 1
687	10825	20332	1.73	0.E+00	BF104886.1	EST HUMAN	60182627F1_NHL1 MSGC_75 Homo sapiens cDNA clone IMAGE-045547 5'
553	10829	20336	1.49	0.E+00	4801854 NT	Human sapiens actinomycetidine synthetase beta (cACB), mRNA	
568	10834	20342	1.06	0.E+00	AF227712.1	NT	Human sapiens Snf2-like and Olp-interacting zinc finger protein mRNA, partial cds
698	10834	20343	1.05	0.E+00	AF227712.1	NT	Human sapiens Snf2-like and Olp-interacting zinc finger protein mRNA, partial cds
607	10843	20351	1.38	0.E+00	AF149773.1	NT	Human sapiens NOD1 protein (NOD1) gene, exon 1, 2, and 3
610	10846	20354	0.96	0.E+00	6800918 NT	Human sapiens low density lipoprotein-related protein 2 (LRP2), mRNA	
611	10847	20355	2.22	0.E+00	6800918 NT	Human sapiens low density lipoprotein-related protein 2 (LRP2), mRNA	
611	10847	20356	2.22	0.E+00	6800918 NT	Human sapiens low density lipoprotein-related protein 2 (LRP2), mRNA	
612	10848	20357	0.93	0.E+00	6800918 NT	Human sapiens low density lipoprotein-related protein 2 (LRP2), mRNA	
619	10556	20358	1.34	0.E+00	6800918 NT	Human sapiens low density lipoprotein-related protein 2 (LRP2), mRNA	
623	10560	20352	6.37	0.E+00	D10781.1	NT	ZB65074.7_Sources: cell, heart, liver, spleen, testis Human genome cDNA clone IMAGE-415567 5' similar to ZN10164.1 Sources: fetal liver, spleen, testis Human genome cDNA clone IMAGE-415567 5'
627	10564	20375	3.17	0.E+00	W78811.1	EST HUMAN	6015164.1 Sources: fetal liver, spleen, testis Human genome cDNA clone IMAGE-415567 5' similar to ZN10164.1 Sources: fetal liver, spleen, testis Human genome cDNA clone IMAGE-415567 5'
627	10564	20376	3.17	0.E+00	W78811.1	EST HUMAN	6015164.1 Sources: fetal liver, spleen, testis Human genome cDNA clone IMAGE-415567 5'
630	10567		3.28	0.E+00	488526 NT	Human sapiens novel SH2-containing protein (NSP2) mRNA	
637	10574	20358	2.69	0.E+00	6000503 NT	Human sapiens receptor, ionophore, N-methyl-D-aspartate 2B (GRIN2B) mRNA	
639	10576	20351	1.06	0.E+00	5631624 NT	Human sapiens CCAT1-box-binding transcription factor (CBP2) mRNA	
642	10579	20356	1.41	0.E+00	U02253.1	Human neutral amino acid transporter (ASCT1) gene, exon 8	
646	10583	20358	2.18	0.E+00	AF070339.1	Human sapiens sodium calcium exchanger isoform NaCa3 (NCX3) mRNA, complete cds	
646	10583	20359	2.18	0.E+00	AF070339.1	Human sapiens sodium calcium exchanger isoform NaCa3 (NCX3) mRNA, complete cds	
652	10589	20404	3.98	0.E+00	4623947 NT	Human sapiens protein kinase, X-linked (PRKX) mRNA	

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
652	10588	20405	3.98	0.0E+00	4826947	NT	Human sapiens protein kinase, X-linked (PKX) mRNA
658	12672	9.95	0.0E+00	X67147.1	NT	Human endogenous retrovirus type I (HERV)	
672	10601	20419	4.56	0.0E+00	4826942	NT	Human sapiens mRNA for KIAA0866 protein, partial cds
672	10606	20423	4.35	0.0E+00	AB29612.1	NT	Human sapiens similar to integral membrane glycoprotein POM121 (POMK2L1) mRNA
682	10615	20438	2.03	0.0E+00	7687469	NT	np_001151 NC_ CGAP_B1.1 Homo sapiens cDNA clone IMAGE:1128633 3' similar to gpBX57352
692	10625	20450	19.46	0.0E+00	AA6114587.1	EST_HUMAN	INTERFERON-INDUCIBLE PROTEIN 1 (AU-1) (HUMAN)
696	10626	20454	7.66	0.0E+00	MB0075.1	NT	Human von Willebrand factor gene, exons 23 through 34
696	10626	20455	7.56	0.0E+00	MB0075.1	NT	Human von Willebrand factor gene, exons 23 through 34
706	10639	20464	1.45	0.0E+00	5032152	NT	Human sapiens TIF receptor-associated factor 1 (TIAF1) mRNA
712	10844	20470	3.89	0.0E+00	AF264750.1	NT	Human sapiens ALR-like protein mRNA, partial cds
712	10844	20471	3.89	0.0E+00	AF264750.1	NT	Human sapiens ALR-like protein mRNA, partial cds
714	10846	20474	9.78	0.0E+00	11546890	NT	Human sapiens hypothetical protein FLJ21334 (FLJ21334) mRNA
719	10851	20481	1.7	0.0E+00	B5241577.1	EST_HUMAN	TCAAP1D0779 (ecdysone acute myelogenous leukemia cell (FAB M1) Bayly/HOSC) project=TOAA_Hamo
739	10870	20505	1.12	0.0E+00	AF229980.2	NT	Human sapiens MHC class II antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
739	10870	20506	1.12	0.0E+00	AF229980.2	NT	Human sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
740	10871	20507	2.4	0.0E+00	AF170482.1	NT	Human sapiens chloride channel ClC-4 mRNA, complete cds
743	10874	20510	1.55	0.0E+00	J03754.1	NT	Human, plasmalogens activator inhibitor-1 gene, exons 2 to 9
743	10874	20511	1.55	0.0E+00	J03754.1	NT	Human, plasmalogens activator inhibitor-1 gene, exons 2 to 9
745	10876	20512	0.78	0.0E+00	AB037786.1	NT	Human sapiens mRNA for KIAA359 protein, partial cds
746	10877	20513	1.12	0.0E+00	6912749	NT	Human sapiens zinc finger protein 212 (ZFP212) mRNA
747	12676	20514	0.81	0.0E+00	D09612.1	NT	Human sapiens mRNA for respiratory protein, partial cds
748	10878	20515	2.17	0.0E+00	BE66755.1	EST_HUMAN	Y68508.11 Swiss-Prot: 2B1B1S; Homo sapiens cDNA clone IMAGE:394903 5
752	10882	20519	3.38	0.0E+00	R48915.1	EST_HUMAN	Y68508.11 Swiss-Prot: 2B1B1S; Homo sapiens cDNA clone IMAGE:154046 6
753	10883	20520	2.4	0.0E+00	5032086	NT	Human sapiens gene for KIAA0760 protein, partial cds
762	10892	20529	1.58	0.0E+00	AB011399.1	NT	Human sapiens gene for AI-5, complete cds
765	10896	20533	2.97	0.0E+00	7861965	NT	Human mRNA for KIAA0170 gene product (KIAA0170) mRNA
775	10705	20544	1.17	0.0E+00	DB00061.1	NT	Human mRNA for KIAA0164 gene, partial cds
775	10705	20545	1.17	0.0E+00	DB00061.1	NT	Human mRNA for KIAA0164 gene, partial cds
780	10710	20549	2.64	0.0E+00	X89772.1	NT	H_Aspase mRNA for interferon alpha/beta receptor (long form)
784	10714	20553	2.37	0.0E+00	AB202717.1	NT	Human sapiens mRNA for KIAA0910 protein, partial cds
784	10714	20554	2.37	0.0E+00	AB202717.1	NT	Human sapiens mRNA for KIAA0910 protein, partial cds
789	10718	20560	6.84	0.0E+00	5174478	NT	Human sapiens parcatin (PCAT) mRNA

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Table 4
Single Exon Probes Enriched in Heart

Probe	Top Hit Descriptor		Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source
	Exon ID No.	ORF SEQ ID NO.			
790	10719		7.0E-00	4507500	NT
807	10706	20651	1.8E-00	7657213	NT
809	10737	20682	4.4E-00	7657213	NT
810	10739	20694	3.9E-00	4557698	NT
810	10740	20690	1.2E-00	AF010830_1	NT
816	10744	20591	1.2E-00	AF010830_1	NT
821	10749	20598	1.1E-00	4503854	NT
825	10722	20691	1.5E-00	4507500	NT
832	10759	20692	1.65	0.0E+00	SLC5A3
836	10753	20613	1.57	0.0E+00	AF02713
836	10753	20613	3.37	0.0E+00	AB28942_1
836	10753	20614	3.37	0.0E+00	AB28942_1
837	10734	20615	7.38	0.0E+00	450752
839	10705	20610	3.03	0.0E+00	AB28942_1
843	10706	20617	2.02	0.0E+00	4507628
843	10707	20620	1.25	0.0E+00	AB20217_1
843	10707	20621	1.25	0.0E+00	AB20217_1
844	10752		1.97	0.0E+00	AA353272_1
844	10771	20623	1.97	0.0E+00	AA353272_1
845	10772		7.93	0.0E+00	Bf577694_1
846	10776	20624	1.3	0.0E+00	7657213
849	10776	20625	1.3	0.0E+00	7657213
850	10777	20627	2.16	0.0E+00	7657213
873	10709	20650	0.87	0.0E+00	AL16263_2
880	10698	20655	1.85	0.0E+00	BE081562_1
880	10698	20656	1.85	0.0E+00	BE081562_1
890	10616		3.93	0.0E+00	AL16263_2
900	10825		3.93	0.0E+00	4509698
903	10825		3.29	0.0E+00	4509698
904	10826	20673	1.5	0.0E+00	AF08747_1
905	10820	20674	0.99	0.0E+00	5653694_1
905	10820	20679	0.99	0.0E+00	5653684_1
905	10820	20678	0.99	0.0E+00	5653694_1

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 Table 4
 Single Exon Probes Expressed in Heart

Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar (Top) NT BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
905	10830	20677	2.14	0.0E+00	28191.1	NT	Human <i>collagen type I (alpha 1)</i> gene, exons 1-4, complete cds
909	10833	20680	105.13	0.0E+00	Z20565.1	NT	Human <i>collagens of cardiac alpha-mycosin heavy chain gene</i>
909	10833	20681	105.13	0.0E+00	Z20565.1	NT	Human <i>collagens of cardiac alpha-mycosin heavy chain gene</i>
910	10834	20682	167.64	0.0E+00	Z20565.1	NT	Human <i>collagens of cardiac alpha-mycosin heavy chain gene</i>
910	10834	20683	167.64	0.0E+00	Z20565.1	NT	Human <i>collagens of cardiac alpha-mycosin heavy chain gene</i>
935	10860	20706	36.3	0.0E+00	M37190.1	NT	Human <i>ras inhibitor mRNA</i> , 3' end
935	10861	20707	13.26	0.0E+00	M37190.1	NT	Human <i>ras inhibitor mRNA</i> , 3' end
937	10862	20708	53.71	0.0E+00	M37190.1	NT	Human <i>ras inhibitor mRNA</i> , 3' end
938	10863	20709	1.9	0.0E+00	4507430.1	NT	Human <i>septins</i> <i>lytrophic embryonic factor (TEF)</i> mRNA
938	10863	20710	1.9	0.0E+00	4507430.1	NT	Human <i>septins</i> <i>lytrophic embryonic factor (TEF)</i> mRNA
946	12681	20717	2.46	0.0E+00	AJ01948.1	EST_HUMAN	osprey63.51 NCL_CGAP_GC3 Human septins cDNA clone IMAGE:16134013'
946	12681	20718	2.46	0.0E+00	AJ01948.1	EST_HUMAN	osprey63.51 NCL_CGAP_GC3 Human septins cDNA clone IMAGE:16134013'
948	10972	20720	7.21	0.0E+00	7057260.1	NT	Human <i>septins KIA0929 protein Nas2 interacting nuclear targeting (NINT) homolog (KIA0929)</i> , mRNA
909	10862	20730	2.52	0.0E+00	AB303050.1	NT	Human <i>septins mRNA</i> for PSP24, complete cds
997	10890	20736	4.64	0.0E+00	BP360974.1	EST_HUMAN	PM2-GN0014-0505000-001-002 GN0014 Human septins cDNA
997	10890	20737	4.64	0.0E+00	BP360974.1	EST_HUMAN	PM2-GN0014-0505000-001-002 GN0014 Human septins cDNA
997	10890	20738	4.64	0.0E+00	BP360974.1	EST_HUMAN	PM2-GN0014-0505000-001-002 GN0014 Human septins cDNA
998	10891	20739	1.27	0.0E+00	X52207.1	NT	Human <i>septins partial c-fgr genes, exons 2 and 3</i>
998	10891	20740	1.27	0.0E+00	X52207.1	NT	Human <i>septins partial c-fgr genes, exons 2 and 3</i>
977	10900	20747	1.25	0.0E+00	7475909.1	NT	Human <i>septins chromodomain protein Y-chromosome-like (CDYL)</i> , mRNA
988	10910	20755	1.05	0.0E+00	U85688.1	NT	Human <i>beta-tubulin TUB40</i> gene, complete cds
989	10911	20756	7.49	0.0E+00	U85688.1	NT	Human <i>beta-tubulin TUB40</i> gene, complete cds
990	10811	20756	6.69	0.0E+00	U85688.1	NT	Human <i>beta-tubulin TUB40</i> gene, complete cds
993	10914	20756	1.98	0.0E+00	AF198490.1	NT	Human <i>Septins Bg22_1 region and M1 Gag</i> (CSEFA2T1) gene, partial cds
994	10914	20756	3.46	0.0E+00	AF198490.1	NT	Human <i>Septins Bg22_1 region and M1 Gag</i> (CSEFA2T1) gene, partial cds
997	10917	20761	0.84	0.0E+00	AF111170.3	NT	Human <i>Septins 14632 Jagged2</i> gene, complete cds, and unknown gene
998	10917	20761	1.43	0.0E+00	AF111170.3	NT	Human <i>Septins 14632 Jagged2</i> gene, complete cds, and unknown gene
999	10917	20761	1.81	0.0E+00	AF111170.3	NT	Human <i>Septins 14632 Jagged2</i> gene, complete cds, and unknown gene
1000	10918	20762	2.23	0.0E+00	AF111170.3	NT	Human <i>Septins 14632 Jagged2</i> gene, complete cds, and unknown gene
1003	10921	20765	2.28	0.0E+00	7081685.1	NT	Human <i>Septins inner membrane protein, microtubule (mtmef)</i> (mtmef), mRNA
1007	10925	20769	2.68	0.0E+00	5803114.1	NT	aa890751 Strategies felis <i>ratna</i> 597292 Human <i>septins cDNA clone IMAGE:8382383</i> similar to SWPRSL_HUMAN P4170 26S PROTEASE REGULATORY SUBUNIT 8 ;
1009	10927		1.94	0.0E+00	AA518680.1	EST_HUMAN	

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 Table 4
 Single Exon Proteins Expressed in Heart

Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
EST516124 WATM1 Homo sapiens cDNA clone 51124 similar to DNA-DIRECTED RNA POLYMERASE II							
1012	10630	20774	1.04	0.0E+00	NA3182.1	EST_HUMAN	EST516124 WATM1 Homo sapiens clone 51124 similar to DNA-DIRECTED RNA POLYMERASE II (alignment Ser and Pro with BLASTx or p)
1012	10630	20775	1.04	0.0E+00	NA3182.1	EST_HUMAN	EST516124 WATM1 Homo sapiens clone 51124 similar to DNA-DIRECTED RNA POLYMERASE II (alignment Ser and Pro with BLASTx or p)
1013	10531	20776	0.97	0.0E+00	4756259 NT	Hom sapiens TRAF family member-associated NFkB activator (TANK) mRNA	Hom sapiens TRAF family member-associated NFkB activator (TANK) mRNA
1013	10531	20777	0.97	0.0E+00	4756259 NT	Hom sapiens TRAF family member-associated NFkB activator (TANK) mRNA	Hom sapiens TRAF family member-associated NFkB activator (TANK) mRNA
1017	10835	20792	4.44	0.0E+00	8922633 NT	Hom sapiens hypothetical protein FLJ11196 (FLJ11196) mRNA	Hom sapiens heat shock 70D protein 95 (mornell-1), HSP90B mRNA
1031	10549	20792	2.19	0.0E+00	4756259 NT	Hom sapiens heat shock 70D protein 95 (mornell-1), HSP90B mRNA	Hom sapiens heat shock 70D protein 95 (mornell-1), HSP90B mRNA
1048	10666	20807	1.98	0.0E+00	4826957 NT	Hom sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6) mRNA	Hom sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6) mRNA
1048	10666	20808	1.98	0.0E+00	4826957 NT	Hom sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6) mRNA	Hom sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6) mRNA
1053	10870	20812	2.52	0.0E+00	8922624 NT	Hom sapiens hypothetical protein FLJ_20695 (FLJ20695) mRNA	Hom sapiens hypothetical protein FLJ_20695 (FLJ20695) mRNA
1053	10870	20813	2.52	0.0E+00	8922624 NT	Hom sapiens hypothetical protein FLJ_20695 (FLJ20695) mRNA	Hom sapiens hypothetical protein FLJ_20695 (FLJ20695) mRNA
1054	10671	20814	38.24	0.0E+00	AL245622.1	Hom sapiens mRNA for alpha-tubulin 8 (TUBA8) gene	Hom sapiens mRNA for alpha-tubulin 8 (TUBA8) gene
1056	10673	20815	0.93	0.0E+00	8922627 NT	Hom sapiens hypothetical protein FLJ_20696 (FLJ20696) mRNA	Hom sapiens hypothetical protein FLJ_20696 (FLJ20696) mRNA
1058	10675	20818	3.28	0.0E+00	8922627 NT	Hom sapiens hypothetical protein FLJ_20696 (FLJ20696) mRNA	Hom sapiens hypothetical protein FLJ_20696 (FLJ20696) mRNA
1068	10862	20827	3.58	0.0E+00	4756217 NT	Hom sapiens Delta associated protein 3 (DAP-3) mRNA	Hom sapiens Delta associated protein 3 (DAP-3) mRNA
1080	10069	20837	3.6	0.0E+00	BE005209.1	EST_HUMAN	MRC-BN0115;203000-000-h08 BNI0115 Homo sapiens dDNA
1103	11019	20861	3.79	0.0E+00	7700134 NT	Hom sapiens potassium channel subfamily K, member 9 (KCNK9) mRNA	Hom sapiens potassium channel subfamily K, member 9 (KCNK9) mRNA
1103	11019	20862	3.79	0.0E+00	7700134 NT	Hom sapiens potassium channel subfamily K, member 9 (KCNK9) mRNA	Hom sapiens potassium channel subfamily K, member 9 (KCNK9) mRNA
1116	11031	20872	1.12	0.0E+00	4826947 NT	Hom sapiens protein kinase, X-linked (PRKX) mRNA	Hom sapiens protein kinase, X-linked (PRKX) mRNA
1116	11031	20873	1.12	0.0E+00	4826947 NT	Hom sapiens protein kinase, X-linked (PRKX) mRNA	Hom sapiens protein kinase, X-linked (PRKX) mRNA
1117	11032	20874	5.7	0.0E+00	4826947 NT	Hom sapiens fibroblast specific S27a (RS27A) mRNA	Hom sapiens fibroblast specific S27a (RS27A) mRNA
1119	11034	20876	0.83	0.0E+00	89226290 NT	Hom sapiens hypothetical protein FLJ_20696 (FLJ20696) mRNA	Hom sapiens hypothetical protein FLJ_20696 (FLJ20696) mRNA
1121	11035	20878	10.18	0.0E+00	AB002098.1	NT	Hom sapiens mRNA for Human P2X0, complete cds
1123	11038	20879	12.02	0.0E+00	AB002099.1	NT	Hom sapiens DNA for Human P2X0, complete cds
1124	11039	20880	2.03	0.0E+00	7657498 NT	Hom sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1) mRNA	Hom sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1) mRNA
1124	11039	20881	2.03	0.0E+00	7657498 NT	Hom sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1) mRNA	Hom sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1) mRNA
1128	11042	20884	0.95	0.0E+00	7706260 NT	Hom sapiens Nop-18 binding protein Nop-18 (LOC729) mRNA	Hom sapiens Nop-18 binding protein Nop-18 (LOC729) mRNA
1128	11043	20885	1	0.0E+00	AL147680.1	EST_HUMAN	482610-X1 Soares, pregnant uterus, Nip/TU soares segments dDNA, clone IMAGE:18670113
1131	11045	20887	1.44	0.0E+00	AB202701.1	NT	Hom sapiens mRNA for KIAA0033 protein, partial cds
1140	11054	20896	1.13	0.0E+00	S989544 NT	Hom sapiens chromosome 12 open reading frame 3 (C12orf3) mRNA	Hom sapiens chromosome 12 open reading frame 3 (C12orf3) mRNA
1152	11065	20908	2.31	0.0E+00	7305076 NT	Hom sapiens transcript variant CAD26 mRNA	Hom sapiens transcript variant CAD26 mRNA
1152	11065	20909	2.31	0.0E+00	7305076 NT	Hom sapiens transcript variant CAD26, variant CAD26 mRNA	Hom sapiens transcript variant CAD26, variant CAD26 mRNA
1154	11067	20911	1.59	0.0E+00	AB307855.1	NT	Hom sapiens mRNA for KIAA1414 protein, partial cds

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon ID No:	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Assessment No.	Top Hit Database Source	Top Hit Descriptor	
							Top Hit	Database Source
1181	11074	20920	1.02	0.E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA	mRNA
1181	11101		1.13	0.E+00	7057390	NT	Homo sapiens mur. (E. coli) hemoglobin 3 (MLH3) mRNA	mRNA
1206	11116	20982	1.14	0.E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds	mRNA, partial cds
1206	11116	20983	1.14	0.E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds	mRNA, partial cds
1207	11117	20984	1.31	0.E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds	mRNA, partial cds
1208	12887	20985	0.95	0.E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds	mRNA, partial cds
1226	1134	20988	3.62	0.E+00	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region	mRNA
1227	11135	20989	1.3	0.E+00	4550308	NT	Homo sapiens chromodulin sulfite proteoglycan 4 (midline-3-associated) (CSPG4) mRNA	mRNA
1245	11152		1.48	0.E+00	Y48000.1	NT	Homo sapiens NF2 gene	mRNA
1283	11160	21006	4.69	0.E+00	4569718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA	mRNA
1280	11167	21018	3.68	0.E+00	AF084478.1	NT	Homo sapiens William-Bailey syndrome deletion transcript 9 (WBSCR9) mRNA, complete cds	mRNA, complete cds
1286	11173	21022	1.71	0.E+00	ABD05940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds	mRNA
1288	11173	21023	1.71	0.E+00	ABD05940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds	mRNA
1273	11188	21036	8.42	0.E+00	5174748	NT	Homo sapiens Woffani syndrome (WFS) mRNA	mRNA
1278	11188	21037	6.42	0.E+00	5174748	NT	Homo sapiens Woffani syndrome (WFS) mRNA	mRNA
1278	11188	21038	6.42	0.E+00	5174748	NT	Homo sapiens Woffani syndrome (WFS) mRNA	mRNA
1279	11187		2.6	0.E+00	AF069156.1	NT	Homo sapiens protein phosphatase 2A, B56 gamma subunit, gene, exon 5	mRNA
1289	12898	21050	1.1	0.E+00	7057529	NT	Homo sapiens induced tumor deletion region protein 1 (RTDR1) mRNA	mRNA
1288	12898	21051	1.1	0.E+00	7657529	NT	Homo sapiens induced tumor deletion region protein 1 (RTDR1) mRNA	mRNA
1285	11202	21057	1.71	0.E+00	5803146	NT	Homo sapiens ring finger protein 9 (RNFA9) mRNA	mRNA
1286	11203	21058	0.82	0.E+00	4500004	NT	Homo sapiens zinc finger protein 73 (ZNF73) mRNA	mRNA
1288	11205	21059	1.07	0.E+00	5803146	NT	Homo sapiens ring finger protein 9 (RNFA9) mRNA	mRNA
1300	11207	21061	4.1	0.E+00	AB011491.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds	mRNA
1301	11208	21062	1.06	0.E+00	7081975	NT	Homo sapiens KIAA070 gene product (KIAA070) mRNA	mRNA
1302	11209	21063	4.64	0.E+00	7681065	NT	Homo sapiens KIAA070 gene product (KIAA070) mRNA	mRNA
1303	11210	21064	4.1	0.E+00	84857387	NT	Homo sapiens peroxisome membrane 3 (PEER3) mRNA	mRNA
1303	11210	21065	4.1	0.E+00	84857387	NT	Homo sapiens peroxisome membrane 3 (PEER3) mRNA	mRNA
1315	11221	21078	1.35	0.E+00	M14123.1	NT	Human endogenous retrovirus HERV-K(10)	mRNA
1363	11298	21147	3.89	0.E+00	AJ258014.1	NT	Homo sapiens mRNA for familial cylindromatosis cyl gene	mRNA
1363	11298	21165	5.13	0.E+00	AJ277882.1	NT	cp3806_X1_Scarr_NH7 Homo sapiens cDNA clone IMAGE:18374273 similar to CE4423 ;	mRNA
1368	11301	21160	0.96	0.E+00	A1209756.1	EST HUMAN		
1367	11302	21161	6.18	0.E+00	6042206	NT	RAN, member RAS oncogene family/Homo sapiens RAN, member RAS oncogene family (RAN), mRNA	mRNA

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Single Exon Probes Expressed in Heart

Probe SEC ID NC:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1407 11312	21173	1.4	OE<+00	45056646	NT	Homo sapiens protein convertase subtilisin/kinin type 2 (PCSK2) mRNA Homo sapiens protein convertase subtilisin/kinin type 2 (PCSK2) mRNA	
1407 11312	21174	1.4	OE>+00	45056646	NT	Homo sapiens protein convertase subtilisin/kinin type 2 (PCSK2) mRNA Homo sapiens protein convertase subtilisin/kinin type 2 (PCSK2) mRNA	
1409 11314	21177	2.54	OE<+00	77056565	NT	Homo sapiens KIAA1114 protein (KIAA1114) mRNA Homo sapiens KIAA1114 protein (KIAA1114) mRNA	
1409 11314	21178	2.54	OE<+00	77056565	NT	Homo sapiens KIAA1114 protein (KIAA1114) mRNA Homo sapiens KIAA1114 protein (KIAA1114) mRNA	
1412 11317	21180	8.25	OE<+00	AJ280583.1	NT	Homo sapiens partial T- gene, exons 2 to 5' and Alu repeat elements Homo sapiens alpha-fucosidase (futuress) (elph1) cDNA clone ? exon 7	
1421 11327	21192	3.51	OE<+00	AF058286.1	NT	Homo sapiens loricrin mRNA Homo sapiens loricrin (LTN) mRNA	
1432 11337	21203	9.7	OE<+00	4507720	NT	Homo sapiens loricrin (LTN) mRNA Homo sapiens loricrin (LTN) mRNA	
1452 11337	21204	9.7	OE<+00	4507720	NT	Homo sapiens loricrin (LTN) mRNA Homo sapiens loricrin (LTN) mRNA	
1457 11342	21206	1.02	OE<+00	U35537.1	NT	Human nebulin mRNA, partial cds Human nebulin mRNA, partial cds	
1457 11342	21209	1.02	OE<+00	U35537.1	NT	Human nebulin mRNA, partial cds Human nebulin mRNA, partial cds	
1446 11350	21214	3.05	OE<+00	AL132869.1	NT	Novel human gene on chromosome 20	
1447 11352	21215	1.03	OE<+00	AL317784.1	NT	Novel human gene mapping to chromosome 1	
1451 11355	21220	1.22	OE<+00	D80777.1	NT	Human mRNA for KIAA0720 gene, partial cds Homo sapiens caspase-1 binding protein (KIAA0720) mRNA	
1454 11355	21223	4.97	OE<+00	6912457	NT	Homo sapiens KIAA0717 gene product (KIAA0717) mRNA Homo sapiens KIAA0717 gene product (KIAA0717) mRNA	
1458 11361	21225	1.51	OE<+00	7081685	NT	Homo sapiens KIAA0717 gene product (KIAA0717) mRNA Homo sapiens KIAA0717 gene product (KIAA0717) mRNA	
1468 11381	21226	1.51	OE<+00	7861665	NT	Homo sapiens RIBP30 gene for RING finger protein	
1487 11382	0.97	0.97	OE<+00	YD7629.2	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34	
1462 11387	21231	3.65	OE<+00	MA50076.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34	
1462 11387	21232	3.65	OE<+00	MA50076.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34	
1495 11399	21259	1.32	OE<+00	7706434	NT	Homo sapiens HDIC or homolog of Drosophila hedgehog (LOC51069) mRNA aa34503.1 NC_00841 GO01 Homo sapiens cDNA clone IMAGE:8151165	
1509 11414	21273	0.95	OE<+00	AAH1172.1	EST_HUMAN		
1515 11420	21276	11.95	OE<+00	AF023860.1	NT	Cerebellar autoimmunity syndrome 1 mRNA, complete cds	
1515 11420	21277	11.95	OE<+00	AF023860.1	NT	Cerebellar autoimmunity syndrome 1 mRNA, complete cds	
1517 11422	21280	0.97	OE<+00	D10184.1	NT	bovine mRNA for neurotrophin	
1519 11424		2.03	OE<+00	U78227.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-III mRNA	
1520 11425	21283	3.9	OE<+00	45056044	NT	Homo sapiens transmembrane glycoprotein (GP110) mRNA	
1520 11425	21284	3.9	OE<+00	45056044	NT	Homo sapiens transmembrane glycoprotein (GP110) mRNA	
1522 11426	21285	3.12	OE<+00	7682405	NT	Homo sapiens KIAA0757 protein (KIAA0757) mRNA	
1522 11427		8.41	OE<+00	7056972	NT	Homo sapiens CG12-inducible protein CG12-(CG12-1), mRNA	
1527 11432	21289	6.02	OE<+00	MA802785.1	NT	Human transglutaminase mRNA, complete cds	
1530 11439	21291	6.75	OE<+00	4507720	NT	Homo sapiens loricrin (LTN) mRNA	
1530 11439	21292	6.75	OE<+00	4507720	NT	Homo sapiens loricrin (LTN) mRNA	
1551 12697		10.12	OE<+00	45056054	NT	Homo sapiens fibromodulin protein (FMD) mRNA	

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Probe SEQ ID NC:	Exon SEQ ID NC:	ORF SEQ ID NC:	Expression Signal	Most Similar (Top) H1 ELAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1532	11436	21293	11.11	0.0E+00	MT44985.1	NT	Human laminin receptor (2415 splice) mRNA, 5' end
1541	11446	21306	5.81	0.0E+00	4507720	NT	Human sapeins tRNA (TTT) mRNA
1541	11446	21307	6.61	0.0E+00	4507720	NT	Human sapeins tRNA (TTT) mRNA, 4 (splice/join associated)
1543	11448	21308	12.91	0.0E+00	4503658	NT	Human sapeins chondroitin sulfate proteoglycan 4 (splice/join associated) mRNA
1562	11467	21326	1.96	0.0E+00	283738.1	NT	H. sapiens H1B26 gene
1563	11468	21326	1.38	0.0E+00	5221460	NT	Human sapeins bullophilin, subfamily 2, member A1 (BTN2A1), mRNA
1563	11468	21327	1.38	0.0E+00	5221460	NT	Human sapeins bullophilin, subfamily 2, member A1 (BTN2A1), mRNA
1564	11469	21328	5.5	0.0E+00	AV669831.1	EST_HUMAN	AV669831.1
1564	11469	21329	6.6	0.0E+00	AV669831.1	EST_HUMAN	AV669831.1
1566	12968	21330	1.5	0.0E+00	AB040905.1	NT	Human sapeins mRNA for KIAA1472 protein, partial cds
1570	11474	21331	0.98	0.0E+00	AB157476.1	NT	Human sapeins mRNA for KIAA1472 protein, partial cds
1572	11476	21334	2.49	0.0E+00	7862163	NT	Human sapeins KIAA0569 gene product (KIAA0569), mRNA
1572	11476	21335	2.49	0.0E+00	7862163	NT	Human sapeins KIAA0569 gene product (KIAA0569), mRNA
1574	11478	21336	14.05	0.0E+00	5729870	NT	Human sapeins heat shock 70D protein 10 (HS7C7) (HS7A10), mRNA
1574	11478	21337	14.05	0.0E+00	5729876	NT	Human sapeins heat shock 70D protein 10 (HS7C7) (HS7A10), mRNA
1576	11480	21339	0.94	0.0E+00	MB1905.1	NT	Human sodium channel mRNA
1591	11495	21356	4.67	0.0E+00	Y07605_5.1	Scare adult brain Na ⁺ /H ⁺ 55Y/Human sapeins cDNA clone IMAGE:1383483'	
1602	11507	21368	-14	0.0E+00	AB248529.1	NT	Human sapeins mRNA for KIAA1609 protein, partial cds
1602	11507	21369	1.4	0.0E+00	AB248529.1	NT	Human sapeins mRNA for KIAA1609 protein, partial cds
1645	11546	21410	1.27	0.0E+00	AI768104.1	EST_HUMAN	wg1507_x1 Scarees NSF_F8 SW_0T_PA_P ST Horo sapeins cDNA clone IMAGE:2371477 similar to TR_Q02788_Q02788_Cy22aHs2_ZINC FINGER PROTEIN ;
1646	11550	21411	3.33	0.0E+00	AI768177.1	NT	Human sapeins T-cell receptor gamma VI gene region
1650	11553	21415	1.96	0.0E+00	MD23980.1	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1650	11553	21416	1.56	0.0E+00	MD23981.1	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1652	11555	21418	1.22	0.0E+00	4557887	NT	Human sapeins keratin 18 (KRT18) mRNA
1653	11556	21419	0.92	0.0E+00	78570985	NT	Human sapeins v-beta 8.4 oncovirus G (GB8) A receptor, gamma 2 (GABR2) mRNA
1657	11559	21423	1.11	0.0E+00	4557810	NT	Human sapeins gamma-aminobutyric acid (GABA) A receptor, gamma 2 (GABR2) mRNA
1659	11561	21426	2.69	0.0E+00	I30732.1	EST_HUMAN	I30732.1 Scarees breast 3NB/Human sapeins cDNA clone IMAGE:1822465 similar to gbaM64099
1659	11561	21427	2.90	0.0E+00	I30732.1	EST_HUMAN	I30732.1 Scarees breast 3NB/Human sapeins cDNA clone IMAGE:1822465 similar to gbaM64099
1661	11563	21429	1.21	0.0E+00	2070980	NT	G. sapiens cDNA clone
1661	11563	21430	1.21	0.0E+00	2070981	NT	G. sapiens cDNA clone
1664	11566		7.85	0.0E+00	50374748	NT	Human sapeins high-mobility group (nonhistone chromosomal) protein 17 (HMGB1), mRNA

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Probe Seq ID No.:	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1672	11574	21442	4.55	0.0E+00	8223841	NT	Homo sapiens FOXO2 forkhead factor (LOC65610), mRNA
1677	11579	21448	1.02	0.0E+00	M15560.1	NT	Human hepatocyte growth factor gene, exon 15
1680	11482	21445	1.43	0.0E+00	MT5680.1	NT	Human hepatitis C virus envelope protein gene, exon 15
1695	11587	21460	2.59	0.0E+00	A1026582.1	NT	Homo sapiens WAVE2 mRNA, Y chromosome, family 1, member A1 (FBXWYA1) mRNA
1697	11859	21461	2.6	0.0E+00	S94400.1	NT	TCE zeta (human, Genomic) mRNA, 350 nt, segment 1 of 8
1696	12702	21472	0.87	0.0E+00	11542991	NT	Homo sapiens NOD2 2 protein (NOD2), mRNA
1710	11611	21481	1.75	0.0E+00	AF275841.1	NT	Homo sapiens SMCY (SMCY1) gene, complete cds
1745	12703	1381	0.81	0.0E+00	4502719	NT	Homo sapiens Thrombomodulin protein S2 (PRSF2) mRNA
1749	11649	21517	0.9	0.0E+00	4857566	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1751	11649	21518	0.9	0.0E+00	4857566	NT	Homo sapiens E1A binding protein (EP300) mRNA
1761	11651	21521	1.23	0.0E+00	U65953.1	NT	Human CSF-1 receptor (FMS) gene, complete cds, first (S1VF gene, partial cds)
1754	11654	21525	1.13	0.0E+00	W76571.1	EST_HUMAN	zif267-011 Socred, J-1 heart, NM_011761 Homo sapiens cDNA clone MAGE-449644 5'
1755	12704	21525	3.89	0.0E+00	4950352	NT	Homo sapiens nuclear autoantigenic sperm protein (histone-binding) (NASP) mRNA
1765	11904	21538	7.25	0.0E+00	U14987.1	NT	Human ribosomal protein L21 mRNA, complete cds
1767	11693	21541	4.6	0.0E+00	AB00231.1	NT	Human mRNA for KIAA0333, partial cds
1768	11697	21542	4.34	0.0E+00	4950224	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element 897) (ATF4) mRNA
1768	11697	21543	4.34	0.0E+00	4950224	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element 897) (ATF4) mRNA
1768	11687	21544	4.34	0.0E+00	4950224	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element 897) (ATF4) mRNA
1781	11680	21559	1.04	0.0E+00	4502623	NT	Homo sapiens immunoglobulin superfamily, member 3 (CSF5) mRNA, and translated products
1781	11680	21559	1.04	0.0E+00	4502625	NT	Homo sapiens immunoglobulin superfamily, member 3 (CSF5) mRNA, and translated products
1793	11691	21560	10.22	0.0E+00	6009855	NT	Homo sapiens Retinoid-derived POU-domain factor-1 (RPF-1), mRNA
1793	11691	21567	10.22	0.0E+00	6009855	NT	Homo sapiens Retinoid-derived POU-domain factor-1 (RPF-1), mRNA
1804	11701	21576	3.19	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
1804	11701	21577	3.19	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
1805	11702	21578	4.52	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1805	11702	21579	4.52	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1809	11708	21584	1.47	0.0E+00	AW207280.1	EST_HUMAN	U-B1-4n-f07-Q-U11NC1_CGAP_Su53 Homo sapiens cDNA clone MAGE-272233 3'
1809	11708	21585	1.47	0.0E+00	AW207280.1	EST_HUMAN	U-B1-4n-f07-Q-U11NC1_CGAP_Su53 Homo sapiens cDNA clone MAGE-272233 3'

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No:	Expression Signal	Most Similar BLAST E-value	Top Hit Accession No.	Top Hit Definition Source	Top Hit Descriptor
1832	11729	21603	2.08	0.0E+00	BE277465.1	EST_HUMAN	601179164-F1_NIH_MGE_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1832	11729	21623	2.08	0.0E+00	BE277465.1	EST_HUMAN	601179164-F1_NIH_MGE_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1832	11748	21651	0.99	0.0E+00	BE006392.1	EST_HUMAN	RC2-BN0126-202030-012504_BN0126_Homo_sapiens_cDNA_mRNA_RNA
1834	11777	21651	3.52	0.0E+00	4805384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1831	11777	21652	3.52	0.0E+00	4805384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1839	11785	21651	1.95	0.0E+00	AF157478.1	NT	Homo sapiens polymerase alpha catalytic subunit (RE1) mRNA, complete cds
1860	12070	21661	4.06	0.0E+00	M88478.1	NT	Human transglutaminase mRNA, complete cds
1860	12070	21662	4.06	0.0E+00	M88478.1	NT	Human transglutaminase mRNA, complete cds
1865	11760	21663	2.28	0.0E+00	4805384	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3) mRNA
1865	11760	21670	2.28	0.0E+00	4805384	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3) mRNA
1868	11794	21670	5.25	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1)
1903	11799	21685	1.9	0.0E+00	M56532.1	NT	Human topoisomerase I nucleotide
1913	11808	21686	1.97	0.0E+00	5901985	NT	Homo sapiens histidine ammonia-lyase (HAL) mRNA
1924	11819	21686	1.12	0.0E+00	AL1616282.2	NT	Homo sapiens histidine ammonia-lyase (HAL) mRNA
1926	11821	21700	1.15	0.0E+00	8405716	NT	Homo sapiens chromosome 21 segment HS21C032
1928	11821	21701	1.15	0.0E+00	8405716	NT	Homo sapiens insulin (INSB) mRNA
1927	11822	21702	8.13	0.0E+00	48296538	NT	Homo sapiens acitin, alpha 4 (ACTN4) mRNA
1927	11822	21703	8.13	0.0E+00	48296538	NT	Homo sapiens acitin, alpha 4 (ACTN4) mRNA
1937	11832	21715	1.21	0.0E+00	AB010833.1	NT	Homo sapiens mRNA for KIAA0750 protein, partial cds
1937	11832	21716	1.21	0.0E+00	AB010833.1	NT	Homo sapiens mRNA for KIAA0750 protein, partial cds
1943	11838	21720	2.01	0.0E+00	M33782.1	NT	Human TFEB protein mRNA, partial cds
1943	11838	21721	2.01	0.0E+00	M33782.1	NT	Human TFEB protein mRNA, partial cds
1946	11840	21722	1.33	0.0E+00	AV168324.1	EST_HUMAN	X005601_x1 NC_03495_Pan1 Homo_sapiens_cDNA_clone IMAGE:2679613.3'
1945	11840	21723	1.33	0.0E+00	AV168324.1	EST_HUMAN	X005601_x1 NC_03495_Pan1 Homo_sapiens_cDNA_clone IMAGE:2679613.3'
1946	11841	21724	8.4	0.0E+00	6912457	NT	Homo sapiens cardiac myosin binding protein (KIAA0350) mRNA
1946	11841	21725	8.4	0.0E+00	6912457	NT	Homo sapiens cardiac myosin binding protein (KIAA0350) mRNA
1948	11843	21727	0.92	0.0E+00	Z47586.1	NT	H.sapiens genes for semicogelin I and semicogelin II
1948	11843	21728	0.92	0.0E+00	Z47586.1	NT	H.sapiens genes for semicogelin I and semicogelin II
1955	11850	21737	2.31	0.0E+00	AB240946.1	NT	Homo sapiens mRNA for KIAA153 protein, partial cds
1975	11868	21759	0.86	0.0E+00	A273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
1975	11868	21790	0.86	0.0E+00	A273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds

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Probe Seq ID No.:	Exon Seq ID No.:	ORF Seq ID No.:	Expression Signal	Meet Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2011	11903	21763	1.09	0E+00	BE743215.1	EST_HUMAN	601673865F1 NIH MCG_9 Homo sapiens cDNA clone IMAGE:3835198 5
2011	11903	21764	1.09	0E+00	BE743215.1	EST_HUMAN	601673859F1 NIH MCG_9 Homo sapiens cDNA clone IMAGE:3835198 5
2013	11905	21775	0.96	0E+00	45963648	NT	Homo sapiens coagulation factor IX (plasma thromboplastin component, Christmas disease, hemophilic B)
2014	11906	21768	5.46	0E+00	Al010831.1	EST_HUMAN	AL046831.PC1-E_Homo sapiens cDNA clone PLAGE:4005921 5
2015	11314	21177	1.01	0E+00	7705655	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
2016	11314	21178	1.01	0E+00	7705655	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
2017	11908	21768	1.95	0E+00	A4077586.1	EST_HUMAN	TB225E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone FZ225E10
2017	11908	21768	1.95	0E+00	44077585.1	EST_HUMAN	TB225E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone FZ225E10
2019	11910	21768	2.34	0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121), mRNA
2021	11912	21802	1.6	0E+00	4588683	NT	Homo sapiens phosphatase 6A, CoXP-specific, nod, abn 1 (PDEGA), mRNA
2022	11913	21802	0.92	0E+00	Z423598.1	EST_HUMAN	HSC20IC21 normalized infant brain cDNA Homo sapiens cDNA clone c-00502
2024	11915		1.94	0E+00	A1244247.1	EST_HUMAN	Q6908.X1 NCL COGP_U2 Homo sapiens cDNA clone IMAGE:188897 3' similar to contains AU repetitive element
2030	11920	21811	2.59	0E+00	B5877225.1	EST_HUMAN	601485148F1 NIH MCG_60 Homo sapiens cDNA clone IMAGE:3887747 5
2031	11622	21813	1.5	0E+00	B5731525.1	EST_HUMAN	601672694F1 NIH MCG_79 Homo sapiens cDNA clone IMAGE:4135320 5
2031	11622	21814	1.5	0E+00	B5731525.1	EST_HUMAN	601672694F1 NIH MCG_19 Homo sapiens cDNA clone IMAGE:4135320 5
2035	11926	21819	2.42	0E+00	B5697125.1	EST_HUMAN	RC3-C-CT0413-207076-022-410 CTC015 Homo sapiens cDNA
2035	11626	21820	2.42	0E+00	B5697125.1	EST_HUMAN	RC3-C-CT0413-207076-022-410 CTC015 Homo sapiens cDNA
2040	11931	21826	2.53	0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (AP-2B2) mRNA, complete cds
2040	11931	21827	2.53	0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (AP-2B2) mRNA, complete cds
2045	11934	21831	1.32	0E+00	4758498	NT	Human selenin GTP binding protein (G1BP1) mRNA
2067	11957		2.63	0E+00	B5707964.1	EST_HUMAN	Q9V4N0005-14860-318-10 Q9N065 Homo sapiens cDNA
2068	11958		1.13	0E+00	AF019583.1	EST_HUMAN	Homo sapiens X-linked juvenile reticularis protein (XLR5) mRNA, exon 6 and complete cds
2070	11960	21854	3.09	0E+00	BF027562.1	EST_HUMAN	G01670051-1 NIH MCG_20 Homo sapiens cDNA clone IMAGE:3864765 5
2071	11961	21855	2	0E+00	4503795	NT	Homo sapiens flavin containing monooxygenase 2 (FMO2) mRNA
2073	11963	21856	0.96	0E+00	AF2470766.1	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1)
2074	11964	21857	1.16	0E+00	AV7552706.1	EST_HUMAN	Q3-ZC02-19-2717562-G10 C10219 Homo sapiens cDNA
2076	11968	21859	1.90	0E+00	AI090640.1	EST_HUMAN	QY-BT065-020386-002 BT065 Homo sapiens cDNA
2076	11969	21860	1.90	0E+00	AI090640.1	EST_HUMAN	QY-BT065-020386-002 BT065 Homo sapiens cDNA
2112	12001		1.19	0E+00	7657232	NT	Homo sapiens potassium large conductance calcium-activated channel, subfamily M, beta member 3-like (KCMB3L) mRNA
2152	12020		1.6	0E+00	L47787.1	NT	Human DNA-binding protein mRNA, 3' end

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Assessment No.	Top Hit Database Source	Top Hit Descriptor
2138	12026	21925	1.02	0.0E+00	BE274906.1	EST_HUMAN	60/122338/F NIH M/MC_20 Homo sapiens cDNA clone IMAGE:3346888 5'
2140	12028	21926	1.09	0.0E+00	DE7984.1	NT	Human mRNA for KIAA0244 gene, partial cds
2141	12028	21927	10.46	0.0E+00	AJ778288.1	EST_HUMAN	AY735288 CB Homo sapiens cDNA clone CBNB0150B 5'
2141	12025	21927	10.46	0.0E+00	AJ778289.1	EST_HUMAN	AY735289 CB Homo sapiens cDNA clone CBNB0150B 5'
2143	12031	21929	1.4	0.0E+00	AJ921591.1	EST_HUMAN	gocc261_51 NIH M/MC_1567986 3'
2145	12033	21930	0.9	0.0E+00	M169253.1	NT	Human apolipoprotein B-100 (apoB) gene, exons 22 through 29
2148	12036	21933	17.1	0.0E+00	BP344434.1	EST_HUMAN	80/2014828/F NCI CCAP_Bundi Homo sapiens cDNA clone IMAGE:1450734 5'
2149	12037	21934	11.29	0.0E+00	BP349899.1	EST_HUMAN	60/15721867/F NIH MGC_56 Homo sapiens cDNA clone IMAGE:3859012 3'
2152	12040	21938	2.36	0.0E+00	BP375789.1	EST_HUMAN	CAT-2NB0141-250000-430-008 NIH M/MC_11 Homo sapiens cDNA
2158	12056	21943	1.77	0.0E+00	BP377897.1	EST_HUMAN	60/1600261/F NIH MGC_19 Homo sapiens cDNA clone IMAGE:3126522 5'
2159	12046	21946	1.82	0.0E+00	BE018790.1	EST_HUMAN	bb84402_51 NIH MGC_10 Homo sapiens cDNA clone IMAGE:3049082 5' similar to TRQ15170 Q15170
2160	12047	21947	0.92	0.0E+00	AJA02513.1	EST_HUMAN	345307_51 Sensors_Lightblue_NbHPU Home sapiens cDNA clone IMAGE:485640 3' similar to 245307_51 Sensors_Lightred_NbHPU Home sapiens cDNA clone IMAGE:485640 3' similar to 245307_51 Sensors_Lightgreen_NbHPU Home sapiens cDNA clone IMAGE:485640 3' similar to 245307_51 Sensors_Lightblue_NbHPU Home sapiens cDNA clone IMAGE:485640 3' similar to 245307_51 Sensors_Lightred_NbHPU Home sapiens cDNA clone IMAGE:485640 3' similar to 245307_51 Sensors_Lightgreen_NbHPU Home sapiens cDNA clone IMAGE:485640 3'
2160	12047	21948	0.92	0.0E+00	AJA02813.1	EST_HUMAN	gb:369887_cds1_Olfactory receptor-like protein homoprote (HUMAN)
2168	12055	21950	2.32	0.0E+00	AL163204.2	NT	Homeo proteins chromosome 21 segment HS21/CDNA
2168	12055	21957	2.32	0.0E+00	AL163204.2	NT	Homeo proteins chromosome 21 segment HS21/CDNA
2169	12056	21958	2.63	0.0E+00	7682401	NT	Homeo proteins KIAA0682_protein (KIAA0682), mRNA
2169	12056	21959	2.63	0.0E+00	7682401	NT	Homeo proteins KIAA0682_protein (KIAA0682), mRNA
2174	12061	21961	1.04	0.0E+00	U56264.1	NT	Human beta-prime-actinidin (BA2/M2), gene exon 16
2183	12060	21964	7.56	0.0E+00	455756.1	NT	Homeo proteins E1A binding protein p300 (EP300), mRNA
2199	12066	21965	1.44	0.0E+00	7052401	NT	Homeo proteins KIAA0682_protein (KIAA0682), mRNA
2200	12063	21968	1.09	0.0E+00	BE865281.1	EST_HUMAN	60/1483525/F NIH M/MC_72 Homo sapiens cDNA clone IMAGE:391807 5'
2209	12096	21999	0.87	0.0E+00	BE056563.1	EST_HUMAN	60/14862308/F NIH M/MC_70 Homo sapiens cDNA clone IMAGE:3897457 5'
2209	12096	22000	0.87	0.0E+00	BE056563.1	EST_HUMAN	60/14862308/F NIH M/MC_70 Homo sapiens cDNA clone IMAGE:3897457 5'
2212	12098	22002	1.36	0.0E+00	AB057784.1	NT	Homeo proteins mRNA for KIAA1363 protein, partial cds
2233	12137	22034	4.46	0.0E+00	11545748	NT	Homeo proteins differentially expressed in T-DCP (mouse embryo) 8 (DE/F), mRNA
2233	12137	22035	4.16	0.0E+00	11545748	NT	Homeo proteins differentially expressed in T-DCP (mouse embryo) 8 (DE/F), mRNA
2234	12137	22036	2.51	0.0E+00	AJ072404.1	EST_HUMAN	60/0407_51 Sensors_fetal liver, spleen, heart, lung, kidney, liver, ovary, testis mRNA
2236	12140	22038	2.21	0.0E+00	AA428001.1	EST_HUMAN	27/7Ba11_1 Sensors, total fetus, NIH293F8_BaV Homo sapiens cDNA clone IMAGE:759140 5'
2236	12140	22039	2.21	0.0E+00	AA428001.1	EST_HUMAN	27/7Ba11_1 Sensors, total fetus, NIH293F8_BaV Homo sapiens cDNA clone IMAGE:759140 5'
2238	12142	22041	2.23	0.0E+00	BP347059.1	EST_HUMAN	60/0201846/F NCI CCAP_Bm67 Homo sapiens cDNA clone IMAGE:415739 5'

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Description	Top Hit Database Source	Top Hit Accession No.
2283	12147	22048	1.19	2.03	0.0E+00	0D2840.1	NT
2284	12148	22049			0.0E+00	0D2840.1	NT
						Homo sapiens potassium channel K(2,7) mRNA, complete cds	IMAGE:3265370 3' similar to TR-069499 mRNA
2271	12155	22054	1	0.0E+00	BE676056.1	EST_HUMAN	KIAA0867 PROTEIN_N
2274	12158	22056	10.08	0.0E+00	A7044871.1	NT	Homo sapiens phosphotyrosine kinase substrate (PTK642) gene, exon 32
2275	12159	22057	2.72	0.0E+00	A12825542.1	EST_HUMAN	hY7628.X1 Homo sapiens cDNA clone IMAGE:2288182 3'
2280	12164	22061	1.76	0.0E+00	58063178	NT	Homo sapiens sperm specific antigen 2 (SSFA2), mRNA
2280	12164	22062	1.76	0.0E+00	58063178	NT	Homo sapiens sperm specific antigen 2 (SSFA2), mRNA
2281	12173	22072	4.26	0.0E+00	AP088352.1	NT	Homo sapiens tRNA genes, alternative splice products, partial cds
2281	12173	22073	4.26	0.0E+00	AP088352.1	NT	Homo sapiens tRNA genes, alternative splice products, partial cds
2300	12182	22079	2.88	0.0E+00	5174678	NT	Homo sapiens signal regulatory protein, beta-1 (SRPB1- β 1), mRNA
2304	12185	22083	1.76	0.0E+00	AJ131142	EST_HUMAN	hU31142.N12RP2 Homo sapiens cDNA clone IMAGE:2200264 6'
2305	12186	22084	5.71	0.0E+00	BE794026.1	EST_HUMAN	NR_05586459.F1 NIH 3T3C-7 Homo sapiens cDNA clone IMAGE:3641003 5'
2308	12187	22084	0.98	0.0E+00	AY486107.1	EST_HUMAN	NR_05586459.F1 NIH 3T3C-7 Homo sapiens cDNA clone IMAGE:3641003 5'
2307	12188	22085	1.97	0.0E+00	7892017	NT	Homo sapiens KIAA0244 protein (KIAA0244), mRNA
2308	12189	22086	1.44	0.0E+00	4758497	NT	Homo sapiens hexose-6-phosphate dehydrogenase (glucose-1-dehydrogenase) (HPD), mRNA
2308	12189	22087	1.44	0.0E+00	4758497	NT	Homo sapiens hexose-6-phosphate dehydrogenase 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 43 (CYP3A43) and cytochrome P450 polypeptide 7 (CYP3A47) genes, complete cds; cytochrome P450 polypeptide 5 (CYP4A5) gene, partial cds
2309	12190	22088	2.31	0.0E+00	A2P80107.1	NT	Homo sapiens NEUROG1 gene, partial cds
2310	12191	22089	7.57	0.0E+00	AU118682.1	EST_HUMAN	AU118682.HMBA-1 Homo sapiens cDNA clone IMAGE:1028519 5'
2310	12191	22089	7.57	0.0E+00	AU118682.1	EST_HUMAN	AU118682.HMBA-1 Homo sapiens cDNA clone IMAGE:1028519 5'
2310	12191	22090	7.57	0.0E+00	AU118682.1	EST_HUMAN	AU118682.HMBA-1 Homo sapiens cDNA clone IMAGE:1028519 5'
2327			0.0E+00		BE14424.1	EST_HUMAN	AB016007.0 Homo sapiens cDNA clone IMAGE:006707 Homo sapiens cDNA
2363	12243	22138	1.34	0.0E+00	AU118682.1	EST_HUMAN	AU118682.HMBA-1 Homo sapiens cDNA clone IMAGE:1028519 5'
2366	12248		3.64	0.0E+00	A0420265.1	EST_HUMAN	Q96862.29KO Homo sapiens cDNA clone IMAGE:0068682
2359	12249		0.98	0.0E+00	AYV39398.1	EST_HUMAN	M15077.1 Homo sapiens NEUROG1 gene, IMAGE:2381321 3' similar to TR-054624
2371	12251		2.03	0.0E+00	BE88605.1	EST_HUMAN	Q56242 EXON4 ;
2382	12262		1.99	0.0E+00	AB01600522.1	EST_HUMAN	AB0160028.HMBA (T-Name) Homo sapiens cDNA similar to adenylyl kinase isoform 2
2396	12265	22158	5.63	0.0E+00	6016002	NT	Homo sapiens glutamate receptor, ionotropic N-methyl-D-aspartate 2A (GRII2A) mRNA
2390	12266	22162	2.48	0.0E+00	D56095.1	NT	Homo sapiens gene for choleylstein lyso-A receptor, complete cds
2390	12268	22163	2.48	0.0E+00	D56095.1	NT	Homo sapiens gene for choleylstein lyso-A receptor, complete cds

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Probe SEQ ID NC:	Exon SEQ ID NO.:	ORF SEQ ID NO.:	Expression Signal	Most Similar BLAST E Value	Top Hit Association No.	Top Hit Database Source	Top Hit Descriptor
2398	12276	22172	2.28	0<e<=0.00	AFT02275.1	NT	Human epsilon immunoglobulin-like transcript to variant 4 (ILT1c) gene, exon 6
2402	12276	22176	0.98	0<e<=0.00	BFT345274.1	EST_HUMAN	60218038f1 INCL CGAP Brn07 Homo sapiens cDNA clone IMAGE:41554570 5'
2410	12287	22185	3.95	0<e<=0.00	BF7821003.1	EST_HUMAN	Human epsilon isoforms gene XLI_1_001(1241)_mRNA
2414	12291	22188	0.87	0<e<=0.00	BF7821003.1	EST_HUMAN	CMA:AT0003-150806-428-111 M70033 Homo sapiens cDNA
2414	12291	22189	0.87	0<e<=0.00	BE-831003.1	EST_HUMAN	CMA:AT0003-150806-428-111 M70033 Homo sapiens cDNA
2419	12296	22193	1.07	0<e<=0.00	BF569144.1	EST_HUMAN	60218038f1 INCL CGAP Brn07 Homo sapiens cDNA clone IMAGE:43003833 3'
2426	12305	22201	2.66	0<e<=0.00	AV465022.1	EST_HUMAN	60218038f1 INCL CGAP Kit12 Homo sapiens cDNA clone IMAGE:28727569 3'
2430	12307	22202	3.45	0<e<=0.00	AV501001.1	EST_HUMAN	U1-H-BP0968-0074U111 M70033 Homo sapiens cDNA clone IMAGE:3072760 5'
2434	12221	22219	2.08	0<e<=0.00	54530565 NT	Human epsilon protein kinase AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA	
2441	12321	22220	2.08	0<e<=0.00	54530565 NT	Human epsilon protein kinase AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA	
2457	12334	22233	2.35	0<e<=0.00	BE7915542.1	EST_HUMAN	RC5-T0197-30030015-504 ST0197 Homo sapiens cDNA IMAGE:3648451 8 5'
2462	12339	22239	18.13	0<e<=0.00	BF7821003.1	EST_HUMAN	6015625300f1 INCL CG3AP SLC8 Homo sapiens cDNA clone IMAGE:3648451 8 5'
2463	11792	21671	1.16	0<e<=0.00	BF503492.1	EST_HUMAN	Human epsilon desferrioxamine receptor 6 (DR6) mRNA
2464	12340	22234	1.8	0<e<=0.00	BF503492.1	EST_HUMAN	U-H-BP4-002-08-U111 M70033 Homo sapiens cDNA clone IMAGE:3003533 3
2467	12343	22235	2.25	0<e<=0.00	ZB25894.2	NT	Human epsilon mRNA for membrane transport protein (XK gene)
2469	12346	22237	6.67	0<e<=0.00	6463871 NT	Human epsilon platelet-derived growth factor receptor like (PDGFR) mRNA	
2471	12347	22239	1.99	0<e<=0.00	BE9710378.1	EST_HUMAN	601503356f1 INCL CG0570 Homo sapiens cDNA clone IMAGE:3905148 5'
2472	12348	22240	1.96	0<e<=0.00	7657496 NT	Human epsilon similar to rat integral membrane glycoprotein POM121 (POM121L1) mRNA	
2473	12349	22241	55.67	0<e<=0.00	BE1950865.1	EST_HUMAN	60218038f1 INCL CGAP Brn07 Homo sapiens cDNA
2474	12350	22242	1.14	0<e<=0.00	8022340 NT	Human epsilon hypothetical protein FLJ20866 (FLJ20866), mRNA	
2475	12351	22243	3.21	0<e<=0.00	BF53239.1	NT	Human Sec62 (Sec62) mRNA, complete cds
2481	12357	22246	1.64	0<e<=0.00	BF8986490.1	EST_HUMAN	601503211f1 INCL CG0571 Homo sapiens cDNA clone IMAGE:30098865
2486	12361	22256	4.39	0<e<=0.00	BE871591.1	EST_HUMAN	601492021f1 INCL CG0571 Homo sapiens cDNA clone IMAGE:3891371 5
2486	12361	22256	4.39	0<e<=0.00	BE871591.1	EST_HUMAN	601492021f1 INCL CG0571 Homo sapiens cDNA clone IMAGE:3891371 5
2488	12363	22259	0.97	0<e<=0.00	AFT24505.1	NT	Human epsilon adican mRNA, complete cds
2504	12379	22287	1.27	0<e<=0.00	BE536921.1	EST_HUMAN	6010567238f1 INCL CGAP Brn07 Homo sapiens cDNA clone IMAGE:3461161 5
2509	12383	22274	3.8	0<e<=0.00	AJ1463277.1	EST_HUMAN	AJ452777-7RAA11 Homo sapiens cDNA clone Y796A1001673 5'
2509	12383	22275	3.8	0<e<=0.00	AJ1463277.1	EST_HUMAN	AJ452777-7RAA11 Homo sapiens cDNA clone Y796A1001673 5'
2510	12384	22276	1.19	0<e<=0.00	BE252886.1	EST_HUMAN	601106312f1 INCL CGAP Brn07 Homo sapiens cDNA clone IMAGE:2897865 5
2511	12385	22278	0.99	0<e<=0.00	BF223041.1	EST_HUMAN	6027712f1 INCL CGAP Brn07 Homo sapiens cDNA clone IMAGE:3 3' KD PROTEIN;
2514	12388	22280	7.65	0<e<=0.00	AFT24505.1	NT	Human epsilon adican mRNA, complete cds
2540	12414	22304	1.05	0<e<=0.00	BE259883.1	EST_HUMAN	601173601f1 INCL CGAP Brn07 Homo sapiens cDNA clone IMAGE:3526156 5'

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Probe Seq ID NC:	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2653 12854	22319	2.37	0E+00	AB037835.1	NT	Homo sapiens mRNA for KIAA416 protein, partial cds	
2653 12854	22319	2.37	0E+00	AB037835.1	NT	Homo sapiens mRNA for KIAA416 protein, partial cds	
2654 12426		3.85	0E+00	UH4-Uamp-144-U1st NCI CGAP Sub7 Homo sapiens cDNA clone IMAGE-30706313	EST_HUMAN	UH4-Uamp-144-U1st NCI CGAP Sub7 Homo sapiens cDNA clone IMAGE-30706313	
2560 12432	22325	2.8	0E+00	B6797818.1	EST_HUMAN	6025126535f1 NIH/MSC_7 Homo sapiens cDNA clone IMAGE-30906125	
2562 12434		1.16	0E+00	B6716865.1	EST_HUMAN	60176875f1 NIH/MSC_39 Homo sapiens cDNA clone IMAGE-3057685	
2569 12440	22332	1.34	0E+00	AB037742.1	NT	Homo sapiens mRNA for KIAA321 protein, partial cds	
2570 12441	22333	0.97	0E+00	A571737.1	EST_HUMAN	tm19b0.1x1 NCI CGAP Sm25 Homo sapiens cDNA clone IMAGE-21680563 similar to qbl-20977	CALCIUM-TRANSPORTING ATPASE PLASMA MEMBRANE BRAIN ISOFORM 2 (HUMAN)
2571 12442	22334	2.27	0E+00	5031290	NT	Homo sapiens TATA box binding protein (TBP) associated factor, RNA polymerase II, 178kD (TAF2)	mRNA
2573 12444	22336	6.78	0E+00	BB7856.1	NT	Homo sapiens mRNA for KIAA438 protein, partial cds	
2574 12446	22337	1.03	0E+00	BB795456.1	EST_HUMAN	6011560108f1 NIH/MSC_7 Homo sapiens cDNA clone IMAGE-35443045	
2574 12446	22338	1.03	0E+00	BB795456.1	EST_HUMAN	6011560108f1 NIH/MSC_7 Homo sapiens cDNA clone IMAGE-35443045	
2577 12448	22339	1.1	0E+00	BB795456.1	EST_HUMAN	6011437252f1 NIH/MSC_15 Homo sapiens cDNA clone IMAGE-353913895	
2585 12466		10.42	0E+00	BB792472.1	EST_HUMAN	601684830f1 NIH/MSC_7 Homo sapiens cDNA clone IMAGE-3539222	
2585 12466	22368	2.46	0E+00	4504886	NT	IMP (uracil monophosphate) dehydrogenases 1 (IMPDH1) mRNA	
2801 12277	22385	7.02	0E+00	4507722	NT	Homo sapiens tRNA [T] N RNA	
2808 12476		1.09	0E+00	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L444-like ribosomal protein	
2869 12477	22369	5.19	0E+00	AF173227.1	NT	-	
2913 12481	22370	1.17	0E+00	AB011108.1	EST_HUMAN	Homo sapiens gamma 5S ribosome-activating protein 2 (G3CU(B)) gene, exon 1	
2916 12484	22373	0.98	0E+00	AB1153385.1	EST_HUMAN	Homo sapiens mRNA for KIA0566 protein, partial cds	
2917 12485	22374	1.41	0E+00	MM0225.1	NT	Human brain perinorphoid antigen (BPAG1) mRNA, complete cds	
2819 12487	22376	1.21	0E+00	AB119403.1	EST_HUMAN	AB130403 NT-3R-Po Homo sapiens cDNA clone N72R30100770	
2819 12487	22377	1.21	0E+00	AB119403.1	EST_HUMAN	AB130403 NT-3R-Po Homo sapiens cDNA clone N72R30100770	
2822 12490	22380	1.29	0E+00	AV887015.1	EST_HUMAN	RC1-07088-22303001-01-407 070688 Homo sapiens cDNA	
2826 12494	22385	1	0E+00	BB070018.1	EST_HUMAN	7M1505.1x1 NCI CGAP Cof61 Homo sapiens cDNA clone IMAGE-33106893	
2827 12495	22386	3.25	0E+00	BB385165.1	EST_HUMAN	EST125074f1 NIH/MSC_19 Homo sapiens cDNA clone IMAGE-35386235	
2828 12495		2.74	0E+00	BB591253.1	EST_HUMAN	601273873f1 NIH/MSC_39 Homo sapiens cDNA clone IMAGE-36102675	
2856 12623	22413	1.74	0E+00	8822843	NT	Homo sapiens hypothetical protein FLJ11052 (FLJ11052), mRNA	
2860 12655		8.72	0E+00	AA3116723.1	EST_HUMAN	EST1184-14 HCC cell line (minkesis is to liver in mouse)	
2861 12656	22443	0.88	0E+00	BB704884.1	EST_HUMAN	protein L29	
2868 12662	22452	3.59	0E+00	U32635.1	NT	Human beta-prime-ribonuclease (RNase 12), gene 5, exon 5	

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Probe SEQ ID No.	Exon SEQ ID No:	ORF SEQ ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Assession No.	Top Hit Database Source	Top Hit Descriptor
2700	128654	22454	1.08	0E+00	7885857	NT	Homo sapiens neuregulin 1 (NRG1) transcript variant SMDF, mRNA
2701	128655	22455	19.23	0E+00	AF110763.1	NT	Homo sapiens skeletal muscle LM-protein 1 (FLI-1) gene, complete cds
2708	22462	10.37	0E+00	AF110763.1	EST_HUMAN	601991901 F1 NIH MCG_7 Homo sapiens cDNA clone IMAGE:3648983 5'	
2709	12871	22463	3.2	0E+00	Bf5694622.1	EST_HUMAN	602015622 F1 NIH MCG_83 Homo sapiens cDNA clone IMAGE:3648983 5'
2712	12751	22467	13.51	0E+00	Bf5694633.1	EST_HUMAN	601935465 F1 NIH MCG_39 Homo sapiens cDNA clone IMAGE:3648984 5'
2713	12877	22470	1.28	0E+00	AV721647.1	EST_HUMAN	AV721647 HTB Homo sapiens cDNA clone IMAGE:3648985 5'
2715	12877	22470	2.17	0E+00	51744965	NT	Homo sapiens spermatogenesis-associated P01 (KIAA0737) mRNA
2715	12877	22471	2.17	0E+00	51744969	NT	Homo sapiens spermatogenesis-associated P01 (KIAA0737) mRNA
2716	12878	22472	0.9	0E+00	Bf5694640.1	NT	Homo sapiens hypothetical protein FL_20477 (FL_20477), mRNA
2716	12878	22473	0.9	0E+00	88223441	NT	Homo sapiens hypothetical gene in RNA, complete cds
2717	12879	22477	2.2	0E+00	AF280195.1	NT	Homo sapiens hypoxia-regulated gene in RNA, complete cds
2717	12880	22478	15.67	0E+00	AV651096	EST_HUMAN	AV651096 GLC-1 Homo sapiens cDNA clone GLCC107 3'
2719	12881	22475	1.72	0E+00	Bf3717867.1	EST_HUMAN	CMV-TN0141-269060-38-02 TN0141-241 Homo sapiens cDNA
2719	12881	22478	1.72	0E+00	Bf3717867.1	EST_HUMAN	CMV-TN0141-269060-38-02 TN0141-241 Homo sapiens cDNA
2723	12885	22479	3.21	0E+00	4757983	NT	Homo sapiens cathepsin degradation-related protein (34kD) (CCP1) mRNA
2723	12885	22480	3.21	0E+00	4757983	NT	Homo sapiens cathepsin degradation-related protein (34kD) (CCP1) mRNA
2727	12889	22485	2.2	0E+00	BB747103.1	EST_HUMAN	60198033 F1 NIH MCG_9 Homo sapiens cDNA clone IMAGE:3629347 5'
2730	12892	22488	0.97	0E+00	Bf1788961.1	EST_HUMAN	Homo sapiens hypoxia-regulated gene in RNA, complete cds
2741	12893	1.3	0E+00	AL162321.2	NT	Homo sapiens chromosome 21 segment HS21_C001	
2742	12894	22488	3.47	0E+00	BF51410.1	EST_HUMAN	U4-BW-1-amr-0-74Q1-51 NC_03458 Sub7 Homo sapiens cDNA clone IMAGE:3071340 3
2748	12810	1.07	0E+00	4560598	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (malignoma-associated) (CSPG4) mRNA	
2754	12816	22507	4.95	0E+00	BF5797864.1	EST_HUMAN	602085579 F1 NIH MCG_83 Homo sapiens cDNA clone IMAGE:3249815 5'
2758	12820	22513	1.73	0E+00	74276522	NT	Homo sapiens protein tyrosine phosphatase, receptor type T (PTPR), mRNA
2761	12823	22515	0.55	0E+00	AV725534.1	EST_HUMAN	AV725534 HTC Homo sapiens cDNA clone HTCCCA03 5'
2763	12825	22521	11.15	0E+00	Alb79163.1	EST_HUMAN	au55604_y1 Schneider fetal brain 00004-Homo sapiens cDNA clone IMAGE:4214676 5'
2766	12828	22521	1.97	0E+00	Bf509661.1	EST_HUMAN	6020719627 F1 NIH MCG_56 Homo sapiens cDNA clone IMAGE:3648982 5'
2767	12829	22522	2.97	0E+00	Bf552768.1	EST_HUMAN	6019569721 F1 NIH MCG_56 Homo sapiens cDNA clone IMAGE:3648982 5'
2769	12831	22523	1.11	0E+00	Al131494.1	EST_HUMAN	AU131494 NT28P Homo sapiens cDNA clone N72RP_300267 2 5'
2769	12831	22524	1.11	0E+00	Al131494.1	EST_HUMAN	AU131494 NT28P Homo sapiens cDNA clone N72RP_300267 2 5'
2770	12832	22525	10.1	0E+00	BE30344.1	EST_HUMAN	600947494 F1 NIH MCG_17 Homo sapiens cDNA clone IMAGE:3648986 5'
2770	12832	22526	10.1	0E+00	BE30344.1	EST_HUMAN	600947494 F1 NIH MCG_17 Homo sapiens cDNA clone IMAGE:3648986 5'
2776	10151	19896	4.6	0E+00	S76890.1	NT	glycoprotein D-Duffy group antigen (transferrin, blood, genomic DNA, 3008 n]

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Table 4

Single Exon Proteins Expressed in Heart

Probe Seq ID NC:	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
2778	12838	22479	1.94	0.0E+00	AB033281.1	NT	Human epsilon BTRCP2 mRNA for F-box and WD-repeat protein isoform C, complete cds
2784	10649	20480	1.37	0.0E+00	AF284750.1	NT	Human epsilon ALR-like protein mRNA, partial cds
2789	10841	20734	3.58	0.0E+00	45020202	NT	Human epsilon cytochrome P450, subfamily 1 (down-inducible), polypeptide 1 (glaucoma 3, primary infantile)
2799	10841	20735	3.58	0.0E+00	45020202	NT	Human epsilon cytochrome P450, subfamily 1 (down-inducible), polypeptide 1 (glaucoma 3, primary infantile)
2805	12735	22554	2.39	0.0E+00	X85690.1	NT	Human epsilon serine hydroxymethyltransferase pseudogene
2808	12736	22738	1.27	0.0E+00	AF068624.1	NT	Human epsilon 5'-nucleotidase synthase 2 (ALAS2), partial cds
2815	12744	22558	1.07	0.0E+00	AJ238582.1	NT	Human epsilon partial rp3 gene for ribosomal protein L3, U82 ncRNA, U83 ncRNA and U83s ncRNA
2822	12761	22543	1.58	0.0E+00	BE154504.1	EST_HUMAN	Human epsilon nucleoprotein mRNA, 5' end
2824	12751	22544	1.58	0.0E+00	BE154504.1	EST_HUMAN	Human epsilon nucleoprotein mRNA, 5' end
2826	12755	13426	1.38	0.0E+00	XY3428.1	NT	Human epsilon 1d3 gene for HLF-type transcription factor
2828	12767	22547	2.84	0.0E+00	AI162295.2	NT	Human epsilon chromosome 21 segment HS21C088
2833	12761	22551	2.58	0.0E+00	XM_84787.1	NT	Human epsilon transgelin-like mRNA, complete cds
2833	12761	22552	43.46	0.0E+00	DQ0857.1	NT	Human epsilon gamma-mitoplasmic actin (ACTG8) pseudogenes
2837	12765	22555	1.34	0.0E+00	DQ0857.1	NT	Human epsilon gamma-mitoplasmic actin (ACTG8) pseudogenes
2838	12766	22557	4.62	0.0E+00	Y00685.1	NT	Novel human mRNA from chromosome 1, which has similarity to BAT2 genes
2839	12767	22558	0.96	0.0E+00	AF152303.1	NT	Human epsilon mRNA for nuclear DNA helicase II
2840	12768	22560	25.08	0.0E+00	4503470	NT	Human epsilon primate helicase C1 (PCD1)-like-G1 mRNA, complete cds
2851	12779	22568	2.42	0.0E+00	4503470	NT	Human epsilon eukaryotic translation elongation factor 1 alpha 1 (EFLF1A) mRNA
2854	12782	22572	1.35	0.0E+00	AL047509.1	EST_HUMAN	Human epsilon serine/threonine kinase 1 (STK9) mRNA
2855	12783	22573	1.25	0.0E+00	7691883	NT	DKZp58620021 cDNA (synonym: human epsilon mRNA)
2855	12783	22574	1.25	0.0E+00	7691883	NT	Human epsilon KUA0054-6 gene product, 1-helicase (KUA0054), mRNA
2856	12784	22566	3.42	0.0E+00	4503470	NT	Human epsilon chondroitin sulfate proteoglycan 4 (mucanovia-associated) (CSPG4), mRNA
2858	12785	22578	4.95	0.0E+00	BE081895.1	EST_HUMAN	QV2-BT058B-30400-328-103_B1058H-Homo sapiens cDNA
2858	12788	22577	4.95	0.0E+00	BE081896.1	EST_HUMAN	QV2-BT058B-30400-328-103_B1058H-Homo sapiens cDNA
2860	12794	22588	1.64	0.0E+00	AL162205.2	NT	Human epsilon chromosome 21 segment HS21C006

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor:
[Home sapiens chromosome 21 segment HS21 C006 79kb11.51 NCI CGAP_GOB1 Homo sapiens cDNA clone IMAGE 533517 3' similar to contains Ali impellit element]						
2866 12794	22598	1.64	0.E+00	AL163205.2	NT	[Home sapiens chromosome 21 segment HS21 C006 79kb11.51 NCI CGAP_GOB1 Homo sapiens cDNA clone IMAGE 533517 3' similar to contains Ali impellit element]
2867 12795	22590	1.08	0.E+00	AA216587.1	EST_HUMAN	[Home sapiens Epha4 (EPHA4) mRNA]
2871 12801	22599	3.09	0.E+00	Y1920.1	NT	[Home sapiens Epha4 (EPHA4) mRNA]
2877 12804	22599	1.16	0.E+00	47657879	NT	[Home sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA]
2878 12805	22590	18.66	0.E+00	4503470	NT	[Home sapiens Eef1a1 mRNA]
2879 12806	22601	1.25	0.E+00	AI061002.1	EST_HUMAN	[Home sapiens Eef1a1 mRNA]
2879 12806	22602	1.25	0.E+00	AI061002.1	EST_HUMAN	[Home sapiens Eef1a1 mRNA]
2881 12808	22604	1.87	0.E+00	PS27240	ZWSPROT	[ZINC FINGER PROTEIN 132]
2882 12809	22605	1.5	0.E+00	AF162338.1	NT	[Home sapiens proboscidein gamma C4 (PCD4-gamma-C4) mRNA, complete cds]
2897 12824	22677	1.34	0.E+00	AB053059.1	NT	[Home sapiens mRNA for KIAA2357 protein, partial cds]
2897 12824	22678	1.34	0.E+00	AB053059.1	NT	[Home sapiens mRNA for KIAA2357 protein, partial cds]
2898 12826	22618	4.98	0.E+00	AB050941.1	NT	[Home sapiens mRNA for KIAA568 protein, partial cds]
2898 12826	22620	4.98	0.E+00	AB050941.1	NT	[Home sapiens mRNA for KIAA568 protein, partial cds]
2901 12828	22623	2.56	0.E+00	70601923	NT	[Home sapiens KIAA0100 gene product (KIAA0100) mRNA]
2901 12828	22624	2.66	0.E+00	70601903	NT	[Home sapiens KIAA0100 gene product (KIAA0100) mRNA]
2902 12829	22625	3.23	0.E+00	5174574	NT	[MLLT4] mRNA
2902 12829	22626	3.23	0.E+00	5174574	NT	[Home sapiens myeloid/lymphoid or mixed-lineage leukemia (mline) (Drosophila) homolog, translocated to 4 (MLLT4) mRNA]
2907 12833	22630	1.27	0.E+00	BP110702.1	EST_HUMAN	[Home sapiens Cg1728 PROTEIN]
2907 12833	22631	1.27	0.E+00	BF110702.1	EST_HUMAN	[Home sapiens Cg1728 PROTEIN]
2915 12842	22642	2.03	0.E+00	4505084	NT	[Home sapiens melanoma antigen, family B, 4 (MAGEB4) mRNA]
2915 12842	22643	2.03	0.E+00	4505084	NT	[Home sapiens melanoma antigen, family B, 4 (MAGEB4) mRNA]
2917 12844	22645	0.94	0.E+00	4858214	NT	[Home sapiens v-set avian erythroblastosis virus oncogene homolog 4 (E-REB4) mRNA]
2917 12844	22646	0.94	0.E+00	4858214	NT	[Home sapiens v-set avian erythroblastosis virus oncogene homolog 4 (E-REB4) mRNA]
2924 12851	22651	1.6	0.E+00	4758877	NT	[Home sapiens nucleophosmin (NPM3) mRNA]
2927 12854	22654	1.3	0.E+00	X16309.1	NT	[H sapiens NF-H gene, exon 4]
2927 12854	22655	1.3	0.E+00	X16309.1	NT	[H sapiens NF-H gene, exon 4]
2929 12856	22657	7.93	0.E+00	AF1106275.1	NT	[Home sapiens immunoglobulin-like transcript 1c variant 4 (ILT1c) gene, exon 6]

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Table 4
Single Exon Probes Expressed in Heart

Probe	Exon	ORF SEQ ID NO:	Signal NO:	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor	
							EST HUMAN	
2843	-2870			1.13	0.0E+00	A1468690.1	gi 4260911 Sources: <i>RefSeq</i> , <i>RefSeq</i> , <i>Nr</i> . Homo sapiens cDNA clone IMAGE:7732099 3'	
2862	-2879	22877		0.54	0.0E+00	A1781074.1	NT	
2862	-2879	22878		0.84	0.0E+00	A281074.1	Human sapiens neuregulin 2 (NRG2) gene, complete cds; alternatively spliced	
2862	-2879	22879		0.17	0.0E+00	4905118.1	Human sapiens neuregulin 2 (NRG2) gene, complete cds; alternatively spliced	
2864	128	22880		2.15	0.0E+00	AB004854.1	Human sapiens mRNA for PRKU88B, partial cds	
2864	128	22881		2.15	0.0E+00	AB004854.1	Human sapiens mRNA for PRKU88B, partial cds	
2864	128	22880		1.33	0.0E+00	7662273.1	Human sapiens KIAA0737 gene product (KIAA0737), mRNA	
2865	12892	22880		1.55	0.0E+00	5722735.1	Human sapiens calcium channel, voltage-gated, gamma subunit 3 (CACNG3), mRNA	
2865	12892	22889		1.55	0.0E+00	5722735.1	Human sapiens calcium channel, voltage-gated, gamma subunit 3 (CACNG3), mRNA	
2862	12818	22880		0.80	0.0E+00	A1781062.2	Human sapiens chromosome 21 segment 1S21C048	
2862	12820	22714		1.04	0.0E+00	M74699.1	Human displacement protein (CCGAAT) mRNA	
3001	12629	22721		0.82	0.0E+00	49050832.1	Human sapiens serotonergic (SELEN) mRNA	
3006	12844	22730		4.85	0.0E+00	AF195963.1	Human sapiens membrane-bound amine oxidase (POXN) mRNA	
3009	12837	22730		7.86	0.0E+00	55794949.1	Human sapiens heat shock 70D protein 1 (HSP70A), mRNA	
3011	12839	22731		7.80	0.0E+00	55794949.1	Human sapiens heat shock 70D protein 1 (HSP70A), mRNA	
3014	12842	22735		6.08	0.0E+00	AL538403.1	Islet form 2 of a novel human mRNA from chromosome 22	
3017	12945			1.74	0.0E+00	AF017483.1	Human caprine full transcription factor CR33 (CRF55) mRNA, partial cds	
3019	12947	22759		0.99	0.0E+00	45010864.1	Human transcription factor (GHM enhancer 3, JM1 protein, M6 protein, T54 protein, JM10 protein, Ad differentiation-factor-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds, 2 receptor, beta 1 (L2B2B) mRNA	
3243	12900	22750		1.85	0.0E+00	AF196355.1	Human germline F-box protein FBX-L chain C region (fip-1/C16.1)	
3247	12374	22767		1.69	0.0E+00	AF020458.1	Human sapiens melanoma-associated antigen (MAGE-C1) virus, complete cds	
3248	12905	22769		2.85	0.0E+00	AF200208.1	Human SIV/Simian immunodeficiency virus (SIV/SI) virus, partial cds	
3259	12986	22787		3.97	0.0E+00	AF149773.1	Human sapiens NC101 protein (NC101) gene, exons 1, 2, and 3	
3074	13002	22791		4.21	0.0E+00	7662139.1	Human sapiens olfactory receptor-like protein (OLFR4459), mRNA	
3102	13028	22824		3.45	0.0E+00	4820783.1	Human oestrogen receptor-related nuclear Sh2b-related oestrogen member 1 (KGNB1) mRNA	
3111	13038	22832		19.64	0.0E+00	20941.1	Human ferritin heavy chain mRNA, complete cds	
3115	13040	22836		1.79	0.0E+00	AB011121.1	Human sapiens mRNA for KIAA0549 protein, partial cds	
3123	13048	22845		9.41	0.0E+00	T94870.1	SP-23639 BASIC PROTEIN, 28k -;	

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Table 4

Single Exon Probes Expressed in Heart

Probe Seq ID No.:	Exon Seq ID No.:	ORF Seq ID No.:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3158	13065	22862	1.1	0<E-00	BT248336.1	EST HUMAN	BT248336.1 NIH 3T3 clone MAGIE-4107433 5' H. sapiens cDNA clone MAGE-4107433 5'
3140	13005	22863	1.03	0<E-00	A1963068.1	EST HUMAN	wu22m010_x1 NIH_3T3_CGA_P_GCG_Homo_sapiens cDNA clone MAGE-2816903 3'
3145	13070	22870	3.99	0<E-00	X096222.1	NT	H. sapiens mRNA for gamma-glutamyltranspeptidase
3146	13070	22871	3.99	0<E-00	X096222.1	NT	H. sapiens mRNA for gamma-glutamyltranspeptidase
3159	13061	22863	1.15	0<E-00	4758527	NT	Homo sapiens nucleophila II (Hs22X3) mRNA
3166	13081	22884	1.05	0<E-00	4758527	NT	Homo sapiens nucleophila II (Hs22X3) mRNA
3163	13098	22882	7.73	0<E-00	4504659.1	NT	Homo sapiens interferon receptor, type I (IL1R1) mRNA
3164	13069	22863	3.26	0<E-00	4507720	NT	Homo sapiens IL11 mRNA
3165	13069	22864	3.26	0<E-00	4507720	NT	Homo sapiens IL11 mRNA
3180	13105	22910	2.44	0<E-00	M28659.1	NT	Homo sapiens nucleophila phosphoprotein B2B (NP41) mRNA, complete cds
3163	13108	22912	2.23	0<E-00	4502098	NT	Homo sapiens sodium channel protein, mRNA, complete nucleotide sequence
3168	13113	22918	0.82	0<E-00	4759055	NT	(SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
3168	13113	22919	0.82	0<E-00	4759055	NT	Homo sapiens CREB binding protein (CREB-binding protein, "耶尼 syndrome") (CREBBP) mRNA
3180	13115	22920	26.3	0<E-00	AA747783.1	EST HUMAN	aa077611.5 Strategene schizo brain S11 homolog protein, clone MAGE-97/133 3'
3168	13123	22920	4.53	0<E-00	AA728659.1	NT	Homo sapiens angiostatin binding protein 1 mRNA, complete cds
3168	13123	22920	4.53	0<E-00	AA728659.1	NT	Homo sapiens angiostatin binding protein 1 mRNA, complete cds
3210	13134	22935	1.56	0<E-00	4557690	NT	Homo sapiens fibrillin 1 (Marfan syndrome) (FBN1) mRNA
3215	13139	22942	3.35	0<E-00	4507720	NT	Homo sapiens fibrillin 1 (Marfan syndrome) (FBN1) mRNA
3224	13148		4.30	0<E-00	M05168.1	NT	Human connectin 43 processed pseudogene
3225	13140		22949	1.19	0<E-00	AA704043.1	NT
3227	13151	22951	4.15	0<E-00	AA705094.1	NT	
3237	15009	22959	3.46	0<E-00	4502014	NT	
3237	15006	22960	3.46	0<E-00	4502014	NT	
3252	13175	22973	2	0<E-00	AA7265208.1	NT	
3253	13175	22974	0.89	0<E-00	8022624	NT	
3262	13203	23003	4.86	0<E-00	A1958254.1	EST HUMAN	aa077624.1 C-GAP-1 complement component C4 (C4B) G1,1, helicase (SK20), RO, complement factor B (Bf) and complement component C2 (C2) genes,>
3269	13211	23011	2.98	0<E-00	AA728693.1	NT	Homo sapiens very large C-protein coupled receptor-1 (VLCPR) mRNA, complete cds
3269	13211	23012	2.98	0<E-00	AA728693.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-5
3260	13212	23013	1	0<E-00	7857223	NT	Homo sapiens hormonally upregulated heat shock-associated kinase (HSK/HNK), mRNA
3260	13212	23014	1	0<E-00	7857223	NT	Homo sapiens hormonally upregulated heat shock-associated kinase (HSK/HNK), mRNA

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NC:	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3282	13214	230116	1.01	0.0E+00	4826522	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3282	13214	230116	1.01	0.0E+00	4526522	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3286	13218	230116	11.07	0.0E+00	Af111103.1	NT	Homo sapiens syn (MEV) gene, complete cds
9298	13220	23021	0.96	0.0E+00	AB00040.1	NT	Homo sapiens mRNA for KIAA0507 Protein, partial cds
3303	13224	23026	0.99	0.0E+00	BE715039.1	EST_HUMAN	6014656551 NT1_MGC_87 Homo sapiens cDNA clone MAGE3883245
3350	13270	23073	3.01	0.0E+00	AJ128584.1	EST_HUMAN	AUT12864 NT2RM Homo sapiens cDNA clone NT2RM007356
3387	13276	23076	1.66	0.0E+00	73854369.1	NT	Homo sapiens olfactory receptor, family 10 subfamily C, member 1 (ORT10C1) mRNA
3387	13276	23077	1.66	0.0E+00	73854369	NT	Homo sapiens olfactory receptor, family 10 subfamily C, member 1 (ORT10C1) mRNA
3398	13278	23078	1.43	0.0E+00	7702539	NT	Homo sapiens nucleosome-associated protein (LOC550541) mRNA
3381	13280	23080	0.99	0.0E+00	AF211198.1	NT	Homo sapiens T-type calcium channel epsilon subunit Alpha1a isoform (CACNA1I) mRNA, complete cds
3377	13285	23064	1.35	0.0E+00	79652401	NT	Homo sapiens KIAA0562 protein (KIAA0562) mRNA
3377	13295	23065	1.35	0.0E+00	79652401	NT	Homo sapiens basic filament structural protein 1, filamin (BFSF1) mRNA
3378	13296	23066	0.96	0.0E+00	4562396	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subunit A (with TM domain) member 2 (LILRA2), mRNA
3381	13260	23068	1.71	0.0E+00	5803067	NT	Homo sapiens skeletal muscle LIM-protein 1 (FLHL1) gene, complete cds
3380	12665	22455	6.04	0.0E+00	AF110783.1	NT	Homo sapiens death receptor 6 (DR6) mRNA
3385	13312	23111	2.08	0.0E+00	78857058	NT	Homo sapiens mRNA for raphe-2 (raphe gene)
3398	13316	23116	1.53	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for raphe-2 (raphe gene)
3398	13316	23116	1.53	0.0E+00	AJ277276.1	NT	Bacteriophage P1 replication region inducing repA, repB genes and incA, incB, and incC
3400	13317	23118	5.53	0.0E+00	KO2380.1	NT	Incompatibility determinants
3402	13316	23120	1.21	0.0E+00	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type T (PTPRT) mRNA
3403	13326	23126	3.06	0.0E+00	AI958159.1	EST_HUMAN	wp_14701_NCL_CGAP_Lut19 Homo sapiens cDNA clone MAGE2464819 3' similar to TR073934
3409	13326	23127	3.68	0.0E+00	AI958159.1	EST_HUMAN	NEURAL CELL ADHESION MOLECULE :
3413	13330	23132	2.67	0.0E+00	AJ27820.1	NT	Homologous to FBJ murine osteosarcoma viral oncogene homolog (FOS) mRNA
3420	13337	23141	2.96	0.0E+00	6955232	NT	Homologous to FBJ murine osteosarcoma viral oncogene homolog (FOS) mRNA
3420	13337	23142	2.83	0.0E+00	6955232	NT	Homologous to FBJ murine osteosarcoma viral oncogene homolog (FOS) mRNA
3426	13343	23148	1.14	0.0E+00	MA14123.1	NT	Human endogenous retrovirus HERV-K10
3431	13348	23153	0.18	0.0E+00	LA3233.1	NT	Human MDS1/ANXA1 (MDS1) fusion mRNA, partial cds
3436	13353	23157	1.01	0.0E+00	9558718	NT	Homo sapiens hypothetical protein (AF35169) mRNA
3436	13353	23165	1.01	0.0E+00	9558719	NT	Homo sapiens hypothetical protein (AF35169) mRNA

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Table 4

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Probe Seq ID No.:	Exon Seq ID No.:	ORF Seq ID No.:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3440	13357	23163	2.06	0.0E+00	AF045452.1	NT	Human ciliilline K61 transcriptional regulatory protein p54 mRNA, complete cds
3440	13357	23164	2.06	0.0E+00	AF045452.1	NT	Human ciliilline K61 transcriptional regulatory protein p54 mRNA, complete cds
3448	13365	23172	1.23	0.0E+00	AJ231622.1	NT	Human chromosome 21 unknown gene
3455	13371	23175	0.94	0.0E+00	AJ59577.1	EST_HUMAN	6551121-1 Stratagene lung carcinoma cDNA clone IMAGE:84-367' 5'
3455	13371	23176	0.94	0.0E+00	AJ59577.1	EST_HUMAN	6551121-1 Stratagene lung carcinoma cDNA clone IMAGE:84-367' 5'
3455	13371	23177	0.94	0.0E+00	AJ59577.1	EST_HUMAN	al551121-1 Stratagene lung carcinoma cDNA clone IMAGE:84-367' 5'
3458	13374	23180	1.11	0.0E+00	45008028	NT	Human aquaporin 46 (a Kruppel-like factor-associated box (KNSAB) domain polypeptide) (ZNF45) mRNA
3461	13377	23182	2.23	0.0E+00	AF045351.1	EST_HUMAN	601145351-1 NIH_3T3 fibroblast cDNA clone IMAGE:3051735' 5'
3461	13377	23183	2.23	0.0E+00	BB034791.1	EST_HUMAN	601145351-1 NIH_3T3 fibroblast cDNA clone IMAGE:3051735' 5'
3463	13379	23185	1.43	0.0E+00	4829705	NT	Human aquaporin voltage-gated channel, heat-related family member 2 (KCNE2) mRNA
3470	13386	23191	0.92	0.0E+00	AJ840007.1	EST_HUMAN	6015012-1 Scores NIH3V_S1 Homo sapiens cDNA clone IMAGE:2088742 3' similar to TR-0004488 Q00468 KYLASTHENIA GRAVIS AUTOANTIGEN GRAVIN;
3473	13385	23194	0.99	0.0E+00	M10975.1	NT	Human endogenous retrovirus type-1 DNA (+), complete terminal segment
3485	13412	23217	0.82	0.0E+00	45008534	NT	Human aquaporin II (GME2), complete terminal segment
3467	13414		1.3	0.0E+00	AF078868.1	NT	Human aquaporin year-42.2 protein mRNA, complete cds
3505	13422	23225	1.39	0.0E+00	AL135204.1	NT	Novel human gene mapping to chromosome X
3507	13423	23226	0.96	0.0E+00	AB046909.1	NT	Novel human mRNA for KIAA1476 protein, partial cds
3527	13443		0.98	0.0E+00	AB181907.1	EST_HUMAN	cav-7/11.1 Scores; (NP_001101) S1 Homo sapiens cDNA clone IMAGE:10623956 3' similar to WP_116B4.4 CE:13742;
3529	13445	23242	1.26	0.0E+00	6325463	NT	Human aquaporin bulbyophilin, subfamily 3, member A3 (BTNA3), mRNA
3531	13449		4.53	0.0E+00	AV882217.1	EST_HUMAN	GVP-C-10225-235300-168-401 C10225 Human aquaporin cDNA
3540	13450		0.95	0.0E+00	AF110946.1	NT	Human aquaporin gamma-4 (Myoendothelial synthetase, GLIC) gene, partial cds
3541	13457	23250	7.43	0.0E+00	BF076353.1	EST_HUMAN	6020845351-1 NIH_3T3 fibroblast cDNA clone IMAGE:248596' 5'
3564	13478		1.1	0.0E+00	48296967	NT	Human aquaporin retinoblastoma-binding protein 2 (RBBP2) mRNA
3566	13460	23269	0.98	0.0E+00	AV084605.1	EST_HUMAN	6015012-1 Scores; NF_1_7 GBIC_S1 Homo sapiens cDNA clone IMAGE:29190224 3
3566	13480	23270	0.98	0.0E+00	AV084605.1	EST_HUMAN	6015012-1 Scores; NF_1_7 GBIC_S1 Homo sapiens cDNA clone IMAGE:29190224 3
3569	13483	23274	1.13	0.0E+00	4829693	NT	Human aquaporin sulfite (glucosamine)-3-O-sulfotransfase 1 (HS3ST1) mRNA
3571	13485	23277	0.98	0.0E+00	7002319	NT	Human aquaporin gene product (KA04850), mRNA
3578	13492	23282	0.79	0.0E+00	4857732	NT	Human aquaporin 1 (OrbitzBB5 syndrome) (MD1) mRNA
3578	13492	23283	0.79	0.0E+00	4857702	NT	Human aquaporin 1 (OrbitzBB5 syndrome) (MD1) mRNA
3596	13510	23287	1.51	0.0E+00	DB7327.1	NT	Human aquaporin 1 (OrbitzBB5 syndrome) (MD1) mRNA
3600	13544		26.67	0.0E+00	7689491	NT	Human aquaporin 1 (OrbitzBB5 syndrome) (MD1) mRNA
3616	13530	23310	4.26	0.0E+00	AB020552.1	NT	Human aquaporin 1 (OrbitzBB5 syndrome) (MD1) mRNA

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3619	13533	23318	3.26	0.0E+00	AF124280.1	NT	Human sapiens Sh2-containing protein Nsp2 mRNA, complete cds
3619	13533	23319	3.26	0.0E+00	AF124280.1	NT	Human sapiens Sh2-containing protein Nsp2 mRNA, complete cds
3623	13537	23323	1.5	0.0E+00	AA852743.1	EST_HUMAN	NHTBCaen15g0f; Normal Human Trabeculae Bone Cells cDNA clone NHTBCaen15g0f
3623	13537	23324	1.5	0.0E+00	AA852743.1	EST_HUMAN	NHTBCaen15g0f; Normal Human Trabeculae Bone Cells cDNA clone NHTBCaen15g0f
3626	13540	23326	2.2	0.0E+00	AL61204.2	NT	Human sapiens cholinesterase 21 segment HS21C004
3626	13540	23327	2.2	0.0E+00	AL61204.2	NT	Human sapiens cholinesterase 24 (neuronal acetylcholine receptor subunit beta 2) (Mn24), mRNA
3630	13544	23331	1.79	0.0E+00	512926	NT	Human sapiens integral membrane protein 24 (neuronal acetylcholine receptor subunit beta 2) (Mn24), partial cds
3632	13546	23333	1.25	0.0E+00	AB018339.1	EST_HUMAN	UH-BW0-aa-e-124-0-U1.51 NCAP Sub6 Home sapiens cDNA clone IMAGE:21730223
3645	13569	23344	3.53	0.0E+00	AV298134.1	EST_HUMAN	UH-BW0-aa-e-124-0-U1.51 NCAP Sub6 Home sapiens cDNA clone IMAGE:21730223
3645	13569	23345	3.53	0.0E+00	AV298134.1	EST_HUMAN	Human gene for Type IX collagen alpha 1 chain, exon 6
3668	13582	23369	0.99	0.0E+00	AB004650.1	NT	abrogates r1 Scars. NH4H1P1.51 Homo sapiens cDNA clone IMAGE:872949.51 similar to SW-KRBA1. SHEEP POZ2445 KERATIN, HIGH-SULFUR MATRIX PROTEIN, lili4-1 [1]; SW-KRBA1. SHEEP POZ2445 KERATIN, HIGH-SULFUR MATRIX PROTEIN, POM121(1), mRNA
3669	13583	23370	1.03	0.0E+00	AA463859.1	EST_HUMAN	Human sapiens integral membrane glycoprotein POM121(1), mRNA
3677	13591	23377	3.35	0.0E+00	785/408	NT	Human sapiens mRNA for KIAA1414 protein, partial cds
3687	13600	23387	0.91	0.0E+00	AB037805.1	NT	Human sapiens mRNA for KIAA1414 protein, partial cds
3690	13613	23387	3.98	0.0E+00	705/253	NT	Human sapiens KIAA0189 gene product (KIAA0189), mRNA
3701	13615	23389	7.88	0.0E+00	4809718	NT	Human sapiens fibromatosis protein S2 (FSP-2), mRNA
3705	13618	23401	1.02	0.0E+00	785/065	NT	Human sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
3745	13659	23441	1.13	0.0E+00	AF44972.1	NT	Human sapiens soluble neprilin-1 mRNA, complete cds
3747	13660	23441	1.01	0.0E+00	AF185858.1	NT	Human sapiens DNA mismatch repair protein (MMR), gene, complete cds
3748	13661	23442	2.3	0.0E+00	AF179733.1	NT	Pain troponylosis olfactory receptor (P-TR20.8) gene, partial cds
3751	13664	23445	1.69	0.0E+00	785/468	NT	Human sapiens similar to rat integral membrane glycoprotein POM121 (POM121.1), mRNA
3751	13664	23447	1.69	0.0E+00	785/468	NT	Human sapiens similar to rat integral membrane glycoprotein POM121 (POM121.1), mRNA
3752	13665	23448	1.45	0.0E+00	AF202001.1	NT	Human sapiens smooth muscle myosin heavy chain SMH mRNA, alternatively spliced, partial cds
3756	13669	23453	1.1	0.0E+00	1018/159	NT	Mus musculus juxtagillin 1 (Jup) gene, partial cds, mRNA
3758	13671	23455	1.1	0.0E+00	AJ77699.1	EST_HUMAN	leucine/lysine tRNA synthetase, 1 GBC, S1 Human sapiens cDNA clone IMAGE:591507.3
3759	13672	23456	1.7	0.0E+00	AF152496.1	NT	Human sapiens probocaine bala 3 (PCD-B3) mRNA, complete cds
3760	13673	23456	4.46	0.0E+00	475/319	NT	Human sapiens diaminopinacol (DPIP) (C5P) mRNA
3763	13676	23458	11.67	0.0E+00	S78685.1	NT	Human ATP-sensitive inwardly rectifying K-channel subunit (KCNE6/SIR1) gene, complete cds
3764	13677	23459	2	0.0E+00	771/148	NT	Human apolipoprotein methyl CpG binding protein 2 (MECP2), mRNA

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Table 4
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Probe Seq ID No:	Exon No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor		
							BLAST Hit	BLAST Score	
3765	13678	23460	2.39	0.0E+00	7662193	NT	Homo sapiens KIAA0656 gene product (KIAA0656), mRNA		
	3768	13681	23462	1.31	0.0E+00	AF035601.2	NT	Homo sapiens myotin light chain kinase isoform 2 (MLCK) mRNA, complete cds	
	3768	13681	23463	1.31	0.0E+00	AF035601.2	NT	Homo sapiens myotin light chain kinase isoform 2 (MLCK) mRNA, complete cds	
	3769	13682	23464	1.97	0.0E+00	AF035624	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1D (HTR1D) mRNA	
	3773	13685	23467	1.61	0.0E+00	AL165279.2	NT	Homo sapiens chromosome 21 protein Ctg79	
	3775	13687	23470	1.12	0.0E+00	6612755	NT	Homo sapiens transient receptor potential channel 5 (TRPC5) mRNA	
	3780	13692	23476	6.97	0.0E+00	3605178	NT	Homo sapiens chromosome X open reading frame 5 (OCXRF5) mRNA	
	3782	13694	23479	5.97	0.0E+00	4805178	NT	Homo sapiens zinc finger protein ZNF134 mRNA, complete cds	
	3784	13696	23483	1.63	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA	
	3787	13699	23486	0.96	0.0E+00	AF012615.1	NT	Homo sapiens SCS3-like interacting protein 1 (SPIN1) mRNA	
	3788	13700	23487	1.87	0.0E+00	4759171	NT	Homo sapiens amphiphysin gene, partial cds	
	3790	13702	23489	0.82	0.0E+00	AF090117.1	NT	u001011 NC1 CCAP-3mTnT equine cDNA clone MAGE2411065 3 similar to TRO-Q4340	
	3799	13711	23498	2.54	0.0E+00	AF084277.1	EST_HUMAN	O43340_Paseo_2... tandem element D7R7 repetitive element;	
	3802	13714	23502	2.08	0.0E+00	4805674	EST_HUMAN	Homo sapiens isoform 1 protein 58 (RP58) mRNA	
	3807	13719	23508	1.41	0.0E+00	AL040338.1	EST_HUMAN	Homo sapiens isoform 1-3 (synonym: hsc8) mRNA	
	3813	13725	23515	1	0.0E+00	60058687	NT	Homo sapiens Ap1 gamma subunit binding protein 1 (AP1GBF1) mRNA	
	3815	13727	23516	2.45	0.0E+00	4504198	NT	Homo sapiens glutamate receptor, metacarpal-type 3 (GCR3) mRNA	
	3816	13728	23521	1.8	0.0E+00	4930578	NT	Homo sapiens melanoma antigen, family B, member 1 (MAGE1) mRNA	
	3820	13732	23534	0.87	0.0E+00	AF149412.1	NT	Homo sapiens FBXO7 heat-shock and FG-binding protein gene, complete cds	
	3833	13745	23537	1.27	0.0E+00	4800738	NT	Homo sapiens tyrosine receptor 3 (RT3) mRNA	
	3840	13751	23544	1.62	0.0E+00	48865452	NT	Homo sapiens c21s11 gene product (KIAA0462) mRNA	
	3842	13753	23546	1.75	0.0E+00	EF552265.1	EST_HUMAN	R3C-H70602-718603-01-J-12 H70601 Homo sapiens cDNA clone [pyle 1996726 similar to MRK45]	
	3842	13753	23547	1.4	0.0E+00	AW688221.1	EST_HUMAN	MRK45 Human matrix metalloproteinase-associated gene 5	
	3846	13759	23552	1.4	0.0E+00	AW688221.1	EST_HUMAN	MRK45 Human matrix metalloproteinase-associated gene 5	
	3853	13754	23557	3.2	0.0E+00	AF21583.1	NT	Homo sapiens F-box protein FBXO7 (FBXO7) mRNA, partial cds	
	3855	13758	23558	1.27	0.0E+00	BE131941.1	EST_HUMAN	Homo sapiens cDNA clone IMAGE-38068800 5'	
	3860	13771	23563	0.97	0.0E+00	AW580740.1	EST_HUMAN	6011697272F1 NIH3T3 MGE-161 Homo sapiens cDNA clone MAGE-3550745 5'	
							PMS1_L00031_Homo sapiens cDNA		

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 *Table 4
 Single Exon Probes Expressed in Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3863 13803	23587	4.6	0.0E+00	AF116185.1	NT	Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds	
3863 13803	23588	4.6	0.0E+00	AF116185.1	NT	Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds	
3903 13813		3.93	0.0E+00	M2910.1	NT	Human MHC class II lymphocyte antigen DRw4-beta 2 pseudogene, exon 2	
3905 13815		5.44	0.0E+00	AL165303.2	NT	Homo sapiens chromosome 21 segment 1 (S21C103)	
3912 13822	23603	1.53	0.0E+00	AL118494.1	NT	Novel human gene mapping to chromosome 20	
3916 13825	23605	2.89	0.0E+00	AL165284.2	NT	Homo sapiens chromosome 21 segment 1 (S21C084)	
3924 13833	23613	1.46	0.0E+00	AL165208.2	NT	Homo sapiens chromosome 21 segment 1 (S21C058)	
3925 13844		287.75	0.0E+00	4552470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA	
3935 13847	23623	1.18	0.0E+00	7802183	NT	Homo sapiens KIAA0869 gene product (KIAA0869), mRNA	
3940 13848	23624	2.06	0.0E+00	U89866.1	NT	Human zinc finger protein ZNF133	
3960 13867	23645	6.24	0.0E+00	AB015910.1	NT	Chloroacetal aspartate mRNA for fibroblast protein SAX, complete cds	
3968 13875		3.79	0.0E+00	AJ239617.1	NT	Homo sapiens mRNA for IGA-suppressor protein (RNA4.6 gene)	
3976 13883	23659	3.26	0.0E+00	AJ272761	NT	Homo sapiens mRNA for rna-2 (rnase gene)	
3976 13883	23656	3.26	0.0E+00	AJ272761	NT	Homo sapiens mRNA for rna-2 (rnase gene)	
3981 13888	23663	6.63	0.0E+00	5032026	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA	
3981 13888	23664	5.63	0.0E+00	5032026	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA	
3983 13900	23677	0.81	0.0E+00	4550914	NT	Homo sapiens phosphotyrosyl polypeptide linkerase family interferase, phosphotyrosyl polypeptide linkerase synthetase (SAF-T) mRNA	
4001 13907	23682	4.80	0.0E+00	4885306	NT	Homo sapiens G protein-coupled receptor 21 (GPR21), mRNA	
4001 13907	23683	1.94	0.0E+00	AB006625.1	NT	Homo sapiens mRNA for KIAA0287 gene, partial cds	
4004 13910	23684	1.28	0.0E+00	4775907	NT	Homo sapiens mGTPase activating protein-like (NAP1) mRNA	
4004 13910	23695	6.1	0.0E+00	11419297	NT	Homo sapiens tRNA (Yeast mitochondrial) dehydrogenase (TMDH), mRNA	
4005 13911	23696	1.58	0.0E+00	AL089897.1	NT	Novel human mRNA from chromosome 1, which has similarities to EA12 genes	
4013 13917	23695	2.7	0.0E+00	AF1652527.1	NT	Homo sapiens DICER6 (DGCR6) mRNA, complete cds	
4017 15071	23697	0.65	0.0E+00	AF1157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (POLZ) mRNA, complete cds	
4022 11031	20872	0.8	0.0E+00	4829847	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA	
4022 11031	20873	0.8	0.0E+00	4829847	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA	
4028 13881	23707	0.59	0.0E+00	5801945	NT	Homo sapiens bulleidin, subfamily 3, member A2 (BTNB2A2) mRNA	
4028 13881	23709	1.16	0.0E+00	4803054	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GAF) (GAFBP) mRNA	
4028 13832	23710	1.16	0.0E+00	4803054	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GAF) (GAFBP) mRNA	
4032 13895	23711	1.05	0.0E+00	B622201	NT	Homo sapiens hydroxylated protein FLJ10379 (FLJ10379), mRNA	
4041 13844	23722	1.05	0.0E+00	B622201	NT	Homo sapiens myeloid-specific protein FLJ10379 (FLJ10379), mRNA	
4041 13844	23723	4.59	0.0E+00	AB28567.1	EST_HUMAN	wu0404_x1 NC1 CGAP_GoMo sapiens cDNA clone IMAGE-2516675.3	
4041 13844	23723	4.59	0.0E+00	AB28567.1	EST_HUMAN	wu0404_x1 NC1 CGAP_GoMo sapiens cDNA clone IMAGE-2516675.3	

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Table 4
Single Exon Probes Express

Probe	Exon	orf seq	most similar	Top hit	Top hit	Top hit
	seq id	id no:	expression	blast e value	accession	descriptor
4044	13046		20725	0.88	0.E+00	BE184656.1
4044	13046		23726	0.88	0.E+00	BE184657.1
4048	13050		40400	1.99	0.E+00	BS272477.1
4055	13057		23733	0.97	0.E+00	4507476
4056	13058		23734	1.68	0.E+00	5727325
4064	13066		23748	6.19	0.E+00	AV/0675568.1
4066	13071		23751	1.52	0.E+00	AV/0675878.1
4071	13073		-4071	1.33	0.E+00	8622456
4081	13083			1.33	0.E+00	8622496
4068	13088		23775	7.82	0.E+00	AA041438.1
4068	13088		23776	7.82	0.E+00	AA041488.1
4113	14013		23761	3.78	0.E+00	4507720
4113	14013		4113	3.79	0.E+00	4507722
4128	14028		23801	0.87	0.E+00	4506892
4130	14030		4130	8.21	0.E+00	4758196
4130	14030		23804	8.21	0.E+00	4758197
4137	14037			0.88	0.E+00	AL165303.2
4153	14063		23837	1.13	0.E+00	AL005195.1
4177	14070		23851	7.84	0.E+00	AL005190.1
4190	14090		23868	0.95	0.E+00	AV/0656885.1
4196	14096		23876	0.88	0.E+00	4826827
4196	14096		23877	0.88	0.E+00	4826827
4198	14098		23879	5.73	0.E+00	AF174590.1
4200	14105					
4210	14105					
4224	14122		23887	4.99	0.E+00	U1-ASB-24.1
4230	14124					

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Single Exon Proteins Expressed in Heart

Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4230	14135	23905	0.87	0.E+00	68653594	NT	Human sapiens protein kinase C, nu (PRKCNN) mRNA
4237	14135	23911	1.17	0.E+00	U10591.1	NT	Human G2 protein mRNA, partial cds
4237	14135	23912	1.17	0.E+00	U10591.1	NT	Human sapiens COMPLEMENT C1q RECEPTOR (C1QR) mRNA
4245	14144	23917	10.2	0.E+00	6912291	NT	Human sapiens gap junction protein connexin-39 (Cx39) gene, complete cds
4263	14162	23942	1.16	0.E+00	Af153047.2	NT	Human Ig light chain V1 region gamma (humV1c2e) gene, partial cds
4266	14167	23943	1.59	0.E+00	U03901.1	NT	Human sapiens membrane calcium ATPase isoform 1 (ATP2B1) gene, alternative splice products
4274	14173	23950	5.17	0.E+00	U14591.1	NT	Human sapiens membrane calcium ATPase isoform 1 (ATP2B1) gene, partial cds
4278	14177	23955	2.76	0.E+00	280780.1	NT	Human sapiens H2afy2 gene
4278	14177	23959	2.76	0.E+00	280780.1	NT	Human sapiens H2afy2 gene
4284	14183	23962	1.58	0.E+00	X610483.1	NT	Human sapiens H4dc gene for H4 histone
4284	14183	23963	1.59	0.E+00	X610483.1	NT	Human sapiens H4dc gene for H4 histone
4286	14187	23969	6.95	0.E+00	78662001	NT	Human sapiens KIAA0360 gene product (KIAA0360) mRNA
4289	14187	23970	0.95	0.E+00	70503091	NT	Human sapiens caudal type homeobox transcription factor 4 (CDX4) mRNA
4289	14187	23970	0.95	0.E+00	4885129	NT	Human sapiens myoD regulatory light chain interacting protein (MRP) mRNA
4289	14187	23970	0.95	0.E+00	4885129	NT	Human sapiens myoD regulatory light chain interacting protein (MRP) mRNA
4290	14200	23984	-0.08	0.E+00	AB037781.1	NT	Human sapiens myosin regulatory light chain interacting protein (MLR) mRNA
4330	14230	24012	1.1	0.E+00	70191468	NT	Human sapiens membrane-bound amine oxidase (N-PEP2) gene, complete cds
4341	14230	24015	5.85	0.E+00	Af159653.1	NT	Human sapiens N-PEP2 gene, complete cds
4346	14243	24025	8.1	0.E+00	AJ249705.1	NT	Human sapiens ACTH2 gene for alpha-2-activin 2, exon 10
4346	14243	24026	8.1	0.E+00	AJ249705.1	NT	Human sapiens ACTH2 gene for alpha-2-activin 2, exon 10
4368	14284	24026	1.92	0.E+00	Af200629.1	NT	Human sapiens HPS1 gene, ntnn 5
4401	14295	24050	40.23	0.E+00	AW034904.1	EST_HUMAN	Q06681_NCL_CGAP_Leo2_Homo sapiens dna clone IMAGE_2580446_31 similar to SV/ANH_K_HUMAN
4403	15073	24053	1.91	0.E+00	8051619	NT	Human sapiens LIM domain kinase 2 (LIMK2), transcrip1 variant 2a, mRNA, complete cds
4405	14299	24083	1.38	0.E+00	AF016805.1	NT	Human sapiens vascular endothelial cell growth factor 1b/secreted protein (VEGF1b5) mRNA, complete cds
4408	14302	24087	7.5	0.E+00	AJ162027.2	NT	Human sapiens chromosome 21 segment HS205 Human IgMens cDNA
4410	14304	24087	1.29	0.E+00	AM381920.1	EST_HUMAN	FMT-HT0035-017199-002-003 HT-0035 Human IgMens cDNA
4410	14310	24094	1.83	0.E+00	AJ275120.1	NT	Human sapiens mRNA for putative anti-mit-t repeat containing protein (DRP1)
4416	14310	24095	1.83	0.E+00	AJ275120.1	NT	Human sapiens mRNA for putative anti-mit-t repeat containing protein (DRP1)
4418	14312	24097	3.91	0.E+00	4758467	NT	Human sapiens G protein-coupled receptor (GPR65) mRNA
4419	14313	24098	2.3	0.E+00	Af108880.1	NT	Human sapiens small-leucine-rich protein kinase (WNPK1) mRNA, complete cds
4421	14318	24104	1.47	0.E+00	289526.1	NT	H sapiens pancreatic polypeptide receptor PPH1 gene
4433	14324	24111	1.12	0.E+00	S78894.1	NT	Human sapiens ATP-sensitive inward rectifying K-channels subunit (KCNJ5/B/R1) gene, exon

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Asteration No.	Top Hit Database Source	Top Hit Descriptor
4430	14325	24112	1.95	0.0E+00	AF111163.1	NT	Human sapiens <i>Pain (MEV)</i> gene, complete cds
4430	14325	24113	1.95	0.0E+00	AF111163.1	NT	Human sapiens <i>Pain (MEV)</i> gene, complete cds
4439	15074	24123	3.08	0.0E+00	D65967.3	NT	Human sapiens zinc finger protein 135 (ZFP135) mRNA
4444	14336	24128	5.37	0.0E+00	AF208161.1	NT	Human sapiens synapsin precursor mRNA, complete cds
4449	14343	24135	1.92	0.0E+00	AF126237.1	NT	Human sapiens proto-oncogene gamma C3 (P-CDR-gamma-C3) mRNA, complete cds
4452	14346	24139	3.96	0.0E+00	545475	NT	Human sapiens zinc finger protein 211 (ZFP211) mRNA
4462	14356	24147	15.15	0.0E+00	4503470	NT	Human sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4473	14367	24156	1.47	0.0E+00	4503059	NT	Human sapiens chondroitin sulfate proteoglycan 4 (mucanotetraose-associated) (CSPG4) mRNA
4477	14371	24165	1.58	0.0E+00	4502550	NT	Human sapiens calcium/calmodulin-dependent protein kinase IV (CaMKIV) mRNA
4481	14376	24169	2.78	0.0E+00	L5455.1	NT	Human sapiens diuretic substrate sulphate esterase (DSE) gene, complete cds
4483	14377	24170	9.78	0.0E+00	7662051	NT	Human sapiens KIA0350 gene product (KIA0350) mRNA
4483	14377	24164	9.78	0.0E+00	7662051	NT	Human sapiens KIA0350 gene product (KIA0350) mRNA
4498	14392	24177	2.04	0.0E+00	AF143314.1	NT	Human sapiens PTEN (PTEN) gene, exon 3 through 5
4500	14394	24179	8.87	0.0E+00	AJ245418.1	NT	Human sapiens mRNA for G76 protein (G76) gene located in the class III region of the major histocompatibility complex
4500	14394	24180	8.67	0.0E+00	AJ245418.1	NT	Human sapiens mRNA for G76 protein (G76) gene located in the class III region of the major histocompatibility complex
4511	14404	24180	0.84	0.0E+00	D67675.1	NT	Human sapiens DNA for amyloid precursor protein, complete cds
4523	14416	24185	1.5	0.0E+00	AA174072.1	EST_HUMAN	sp1/Bag6.1/Syndecan-1 (retina G37220) Human antigen cDNA clone IMAGE620954.3'
4526	14410	24186	1.55	0.0E+00	7657410	NT	Human sapiens cdz2 (cdz2, Octopressin, Drocophila) homolog 1 (OCD2), mRNA
4528	14421	24205	1.22	0.0E+00	AL165284.2	NT	Human sapiens chromosome 21 segment IS21C084
4529	14422	24205	1.71	0.0E+00	AL165284.1	NT	Human sapiens cyclolin-related protein (LNKTR) gene, complete cds
4530	14423	24205	4.37	0.0E+00	AL165300.2	NT	Human sapiens chromosome 21 segment IS21C100
4531	14424	24216	1.89	0.0E+00	AB057921.1	NT	Human sapiens gene for natriuretic protein, partial cds
4541	14434	24216	1.91	0.0E+00	4557887	NT	Human sapiens keratin 18 (KRT18) mRNA
4541	14434	24217	1.91	0.0E+00	4557887	NT	Human sapiens keratin 18 (KRT18) mRNA
4542	14435	24218	1.3	0.0E+00	AF153819.1	NT	Human sapiens inward-rectifying potassium channel Kv2.1 (KCN2) gene, exon 2 and complete cds
4542	14435	24219	1.3	0.0E+00	AF153819.1	NT	Human sapiens inward-rectifying potassium channel Kv2.1 (KCN2) gene, exon 2 and complete cds
4543	14436	24220	1.18	0.0E+00	AF157441.1	NT	Human sapiens E-cadherin binding protein E7 mRNA, complete cds
4554	14013	23791	7.43	0.0E+00	4501720	NT	Human sapiens ttn (TTN) mRNA
4554	14013	23792	7.43	0.0E+00	4501720	NT	Human sapiens ttn (TTN) mRNA
4590	14452	24238	21.96	0.0E+00	Y18850.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes

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Probe Seq ID NC:	Exon Seq ID NC:	ORF Seq ID NC:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Acession No.	Top Hit Database Source	Top Hit Descriptor
4556	14458	24246	2.32	0.0E+00	BED81527.1	EST_HUMAN	GQ2-BT0636-16G40-142-h05 BT0353 Homo sapiens cDNA region
4574	14465		2.01	0.E+00	AF286641.1	NT	Homo sapiens truncated version Xb (TNXB) gene, partial cds and tRNA gene recombination breakpoint
4580	14470	24257	2.65	0.E+00	AB037820.1	NT	Homo sapiens mRNA for KIAA1366 protein, partial cds
4580	14470	24259	2.65	0.E+00	AB037820.1	NT	Homo sapiens mRNA for KIAA1366 protein, partial cds
4581	14471	24259	2.55	0.E+00	MT4699.1	NT	Human displacement protein (C/CAT) mRNA
4586	14474	24252	1.82	0.E+00	645381.2	NT	Human sapiens bulleidin, subfamily 2, member A2 (BNDA2) mRNA
4585	14474	24253	1.82	0.E+00	645381.2	NT	Human sapiens bulleidin, subfamily 2, member A2 (BNDA2) mRNA
4586	14476	16525	1.03	0.E+00	T59495.1	EST_HUMAN	Yap5g0472 Striatome fetal system (693725) Homo sapiens cDNA clone IMAGE:693725
4586	14476	16526	1.03	0.E+00	T59495.1	EST_HUMAN	Yap5g0472 Striatome fetal system (693725) Homo sapiens cDNA clone IMAGE:693725
4587	14475		0.99	0.E+00	BE278730.1	EST_HUMAN	0011589315f1 NIH 3T3
4593	14481	24207	1.11	0.E+00	BE390050.1	EST_HUMAN	691265246f1 NIH 3T3
4614	14502	24230	37.36	0.E+00	NE69522.1	NT	Human ARHAK nucleoprotein mRNA, 5' end
4617	14505	24234	3.14	0.E+00	NE69197.1	NT	Human haptoglobin and haptoglobin-related protein (HHP and HPR) genes, complete cds
4620	14508	24237	1.12	0.E+00	AF28110.1	NT	Homo sapiens erythroid membrane protein (MCTR) gene, complete cds
4621	14509	24238	1.34	0.E+00	78627161	NT	Homo sapiens Kif11/Mis13 gene product (KIAA0483), mRNA
4635	14624		1.54	0.E+00	NE54977.1	NT	Human CTP27/TAP pseudogene for cytochrome P450
4644	14632	24319	0.95	0.E+00	73049222	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BZ2B) mRNA
4644	14632	24320	0.65	0.E+00	73049222	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BZ2B) mRNA
4652	14638	24327	1.09	0.E+00	AF282801.1	NT	Homo sapiens alpha-3 open IV collagen (COL4A3) gene, promoter region, and exons 1-2-3
4655	14641	24330	0.92	0.E+00	70193230	NT	Homo sapiens protein (40015), mRNA
4655	14641	24331	0.92	0.E+00	70193230	NT	Homo sapiens profilin (40015), mRNA
4676	14652	24355	1.78	0.E+00	AW446487.1	EST_HUMAN	JH-B13 allele-c-04-L1 NCI CGAP Sub1 Homo sapiens cDNA clone IMAGE:2732294-3
4681	14657	24357	1.11	0.E+00	AF303154.1	NT	Homo sapiens aldehyde dehydrogenase 12 (ALDH12) mRNA, complete cds
4686	14672		1.8	0.E+00	AF083242.1	NT	Homo sapiens ISPC0204-iso mRNA, complete cds
4690	14683		2.04	0.E+00	NE65198.1	NT	Human connexin 45 processed pre-mycogene
4735	14620		2.83	0.E+00	AF240795.1	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1) genes, complete cds
4737	14622	24408	2.79	0.E+00	X512015.1	NT	M. franciscana mRNA for melanoprecursor-like protein, lva
4739	14624	24410	1.3	0.E+00	AF084470.1	NT	Homo sapiens William-Bailey syndrome deletion transcript B (WBSRb) mRNA, complete cds
4740	14625	24411	1.47	0.E+00	AF097416.1	NT	Ma miusculus zinc finger transcription factor (Klf50) mRNA, complete cds
4741	14628	24412	3.51	0.E+00	AF493776	NT	Homo sapiens Tsigle, X mental retardation 2 (TSPY) mRNA
4743	14628	24414	61.82	0.E+00	AF86048	NT	Homo sapiens actn, alpha, cardiac muscle (ACTR2) mRNA

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Probe SEQ ID No.	Exon SEQ ID No.	ORF SEQ ID No.	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4744 14629	24415	24417	1.4	0.0E+00	P52740	SWISSPROT	ZINC FINGER PROTEIN 132
4745 14631	24417	0.97	0.0E+00	891221D0	NT	Homo sapiens hypothetical protein DKY7052E1312.1 (DKY7052E1312.1) mRNA	
4746 14633	24419	0.8	0.0E+00	AL161203.2	NT	Homo sapiens chromosomal 21 segment HS21C003	
4752 14637	24424	7.76	0.0E+00	89220900	NT	Homo sapiens hypothetical protein FLJ20732 (FLJ20732) mRNA	
4756 14641	24426	0.95	0.0E+00	70861970	NT	Homo sapiens KIAA0167 gene product (KIAA0167) mRNA	
4757 14642	24426	1.68	0.0E+00	M6081.1	NT	Human Tcr-C-delta gene, exon 1-4; T-cell receptor alpha (Tcr-alpha) gene, J'-J61 segments; and Tcr-C-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J'-J61 segments; and Tcr-C-delta gene, exons 1-4	
4757 14642	24430	1.66	0.0E+00	M6081.1	NT	Human Tcr-C-delta gene, exons 1-4; Tcr-C-delta gene, exons 1-4	
4758 14644	24432	1.50	0.0E+00	334628.1	NT	Homo sapiens Mc-2-2 gene	
4756 14644	24433	1.69	0.0E+00	204623.1	NT	Homo sapiens Mc-2-2 gene	
4762 14647	24435	1.08	0.0E+00	M6582.1	NT	Human collagenase type IV (CLG4) gene, exon 2	
4763 14648	24437	3.22	0.0E+00	AL161280.2	NT	Homo sapiens chromosomal 21 segment HS21C003	
4770 14690	24447	0.96	0.0E+00	5032150	NT	Homo sapiens TATA box binding protein (BP)-associated factor, RNA polymerase II, 1, 2B (TAF2)	
4786 14671	24458	0.82	0.0E+00	680916	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2) mRNA	
4788 14673	24460	1.44	0.0E+00	392841.1	NT	Homo sapiens MICA gene	
4791 14675	24463	1.97	0.0E+00	4588362	NT	Homo sapiens zinc finger protein (KIAA0412) mRNA	
4792 14677	24464	1.18	0.0E+00	AB01453.1	NT	Homo sapiens zinc finger protein (KIAA0412) mRNA	
4794 14679	24468	2.26	0.0E+00	9877948	NT	Mus musculus zinc finger protein interacting with K protein 1 (Zif267) mRNA	
4795 14680	24467	1.05	0.0E+00	5176500	NT	Homo sapiens mRNA expressed antigen 6 (collod-coil probe-rich) (MGEA6) mRNA	
4797 14682	24469	8.64	0.0E+00	4755199	NT	Homo sapiens desmoplakin (DPL) (CSP) mRNA	
4799 14684	24471	1.2	0.0E+00	Y16723.1	NT	Homo sapiens gene encoding filamin, exon 8	
4800 14685	24472	1.61	0.0E+00	770546	NT	Homo sapiens DNA-binding protein (HMG-X/Y)1, mRNA	
4801 14686	24473	1.33	0.0E+00	AA010442.1	NT	Homo sapiens anti-DNA antibody kappa light chain, anti-RN, thread 7	
4806 14690	24477	24.61	0.0E+00	AR05006.1	NT	Homo sapiens MHC class I region	
4808 14692	24480	2.43	0.0E+00	4805058	NT	Homo sapiens opioid receptor delta 1 (OPRD1) mRNA	
4810 14693	24480	2.46	0.0E+00	AF001711.1	NT	Homo sapiens splice variant AKAP260 mRNA, partial cds	
4812 14693	24731	5.48	0.0E+00	4807720	NT	Homo sapiens fibrillarin (FTH) mRNA	
4812 14693	23792	5.48	0.0E+00	4807720	NT	Homo sapiens fibrillarin (FTH) mRNA	
4814 14697	24484	0.66	0.0E+00	A2777852.1	NT	Homo sapiens partial TTN mRNA	
4824 14703	24490	12.01	0.0E+00	4807720	NT	Homo sapiens fibrillarin (FTH) mRNA	
4827 14709	24493	0.56	0.0E+00	D6562.1	NT	Homo sapiens COL4A6 gene for a6(IV) collagen, exon 4 and partial cds	

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Probe SEQ ID NC.	Exon SEQ ID NC.	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Association No.	Top Hit Database Source	Top Hit Descriptor
4851	14713	24496		1.52	0.0E+00	4503054 NT	Human epsilon fattyacyl-phosphate synthase [farnesyl] pyrophosphate synthetase, dimethylallyltransferase, geranyltransferase, alpha-N-acetylneuraminate: alpha-2,6-sialyltransferase, GD3 synthase (SLC16A8) mRNA
4857	14316	24105		1.06	0.0E+00	4505632 NT	Human mRNA for transcription factor ARB68, complete cds
4855	14726	24508		1.31	0.0E+00	DI5050_1 NT	Human mRNA for transcription factor ARB68, complete cds
4845	14726	24509		1.31	0.0E+00	DI5050_1 NT	Human epsilon DNA, DLEC1 to ORC7L4 gene region, section 1.2 [DLEC1, ORC7L3, ORC7L4 genes, complete cds]
4854	14734	24515		0.86	0.0E+00	AB028898.1 NT	Human epsilon chromosome 21 segment HS21C04
4871	14751	24510		1.34	0.0E+00	AL1452384.2 NT	EST_HUMAN
4879	14750	24533		1.45	0.0E+00	AV452728.1 EST_HUMAN	[H-1452384-02-01.5] NCL_CGAP_S055 [Homo sapiens cDNA clone IMAGE-3083691 3'
4885	14766	24542		1.2	0.0E+00	8902526 NT	Human epsilon protein FLJ11160 (FLJ11160), mRNA
4886	14706	24480		7.99	0.0E+00	4507720 NT	Human epsilon (TTN) mRNA
4888	14768	24544		2.81	0.0E+00	AF058332.1 NT	Human epsilon (TTN) gene, alternative splice products, partial cds
4889	14768	24545		2.81	0.0E+00	AF058332.1 NT	Human epsilon (TTN) gene, alternative splice products, partial cds
4894	14774	24552		2.95	0.0E+00	4507720 NT	Human epsilon (TTN) mRNA
4897	14777			4.34	0.0E+00	U14897.1 NT	Human ribosomal protein L21 mRNA, complete cds
4910	14789			2.58	0.0E+00	BE408863.1 EST_HUMAN	[60]303725-1 NCL_MEC21 [Homo sapiens cDNA clone IMAGE-36388118 5'
4915	14764	24569		5.37	0.0E+00	4751969 NT	Human epsilon desmoplakin (DPL) (DSP) mRNA
4925	14654	24574		0.99	0.0E+00	AB209569.1 NT	Human epsilon mRNA for KIAA0395, partial cds
4939	14817	24584		1.65	0.0E+00	89223441 NT	Human epsilon hypothetical protein FLJ20477 (FLJ20477), mRNA
4939	14817	24585		1.65	0.0E+00	89223441 NT	Human epsilon hypothetical protein FLJ20477 (FLJ20477), mRNA
4933	14630	24566		1.06	0.0E+00	UB2671.2 NT	Human epsilon, chondronectine X23 melanoma antigen family A2a (MAGEA2A), melanoma antigen family A12 (MAGEA12), melanoma antigen family A2b (MAGEA2B), melanoma antigen family A3 (MAGEA3), calretinin (CALT), NACDP/Ph-dihydro-oxo-sterol-like protein (NSDH-L), and Lp>
4933	14830	24567		1.06	0.0E+00	UB2671.2 NT	Human epsilon, chondronectine X23 melanoma antigen family A2a (MAGEA2A), melanoma antigen family A12 (MAGEA12), melanoma antigen family A2b (MAGEA2B), melanoma antigen family A3 (MAGEA3), calretinin (CALT), NACDP/Ph-dihydro-oxo-sterol-like protein (NSDH-L), and Lp>
4937	14613	23781		5.81	0.0E+00	4507720 NT	Human epsilon (TTN) mRNA
4937	14613	23782		5.81	0.0E+00	4507720 NT	Human epsilon (TTN) mRNA
4959	14831	24602		3.51	0.0E+00	4507720 NT	Human epsilon (TTN) mRNA
4960	14833	24603		7.76	0.0E+00	4507720 NT	Human epsilon (TTN) mRNA
4968	14843			1.17	0.0E+00	4758225 NT	E2F transcription factor 2 ZF222 mRNA
4978	14853	24610		1.35	0.0E+00	AF0186705.1 NT	Human epsilon E5P ubiquitin-protein ligase (UBE3A) gene, exon 3
4987	14862			1.33	0.0E+00	AL162309.2 NT	Human epsilon chromosome 21 segment HS21CG09

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Association No.	Top Hit Database Source	Top Hit Descriptor
4980	14865	24539	37.78	0.0E+00	D5057/1	NT	<i> Homo sapiens gamma-cytoplasmic acidic (AcGP3) pseudogene</i>
5000	14875	24540	2.29	0.0E+00	A277892/1	NT	<i> Homo sapiens partial TN gene for film</i>
5003	14876	24942	3.02	0.0E+00	45077/20	NT	<i> Homo sapiens film (TTN) mRNA</i>
5005	14013	23761	4.23	0.0E+00	45077/20	NT	<i> Homo sapiens film (TTN) mRNA</i>
5005	14013	23762	2.89	0.0E+00	45077/20	NT	<i> Homo sapiens film (TTN) mRNA</i>
5018	14902	24680	2.43	0.0E+00	X62988/1	NT	<i> Bacillus amyloliquefaciens sacB gene for levansucrase [EC 2.4.1.10]</i>
5037	14909	24981	1.84	0.0E+00	A240605/1	NT	<i> Homo sapiens vascular endothelial growth factor-like gene in 2.0 RNA complete cds</i>
5037	14909	24982	1.84	0.0E+00	A240605/1	NT	<i> Homo sapiens vascular endothelial growth factor-like gene in 2.0 RNA complete cds</i>
5040	14012	24686	1.01	0.0E+00	5454163/1	NT	<i> Homo sapiens cyclophilin (USA-Cyp 3) mRNA</i>
5064	14026	24688	1.22	0.0E+00	88777/00	NT	<i> Homo sapiens G-protein coupled receptor (RE2) mRNA</i>
5075	14013	23761	11.22	0.0E+00	45077/20	NT	<i> Homo sapiens film (TTN) mRNA</i>
5095	14013	23762	11.22	0.0E+00	45077/20	NT	<i> Homo sapiens film (TTN) mRNA</i>
5095	14013	23761	14.9	0.0E+00	45077/20	NT	<i> Homo sapiens film (TTN) mRNA</i>
6006	14013	23762	14.9	0.0E+00	45077/20	NT	<i> Homo sapiens film (TTN) mRNA</i>
6066	14905	24708	1.33	0.0E+00	45573/22	NT	<i> Homo sapiens PR domain containing 1, with ZNF domain (PRDM1) mRNA</i>
5070	14940	24713	1.08	0.0E+00	M10605/1	NT	<i> Human cellular fibronectin mRNA</i>
5070	14940	24714	1.03	0.0E+00	M10605/1	NT	<i> Human cellular fibronectin mRNA</i>
5071	14841	24715	1.06	0.0E+00	U1328/1	NT	<i> Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HHA-H) gene, RspZ gene, and sodium phosphate transporter (NPT3) gene, complete cds</i>
5080	14950	24729	3.04	0.0E+00	45077/20	NT	<i> Homo sapiens film (TTN) mRNA</i>
5096	14013	23761	6.27	0.0E+00	45077/20	NT	<i> Homo sapiens film (TTN) mRNA</i>
5098	14067	24743	6.27	0.0E+00	45077/20	NT	<i> Homo sapiens film (TTN) mRNA</i>
5098	14067	24744	1.34	0.0E+00	13647/5.1	NT	<i> Human olfactory receptor-like gene, complete cds</i>
5099	14013	23761	1.34	0.0E+00	13647/5.1	NT	<i> Human olfactory receptor-like gene, complete cds</i>
5099	14013	23762	9.38	0.0E+00	45077/20	NT	<i> Homo sapiens film (TTN) mRNA</i>
5124	14902	24705	0.94	0.0E+00	A19565/8.1	NT	<i> Homo sapiens repair protein (M13) gene, complete cds</i>
6120	14963	24765	1.35	0.0E+00	53902/13	NT	<i> Homo sapiens diaphan 3 (GFP-3) mRNA</i>
5130	14907	24768	0.8	0.0E+00	A000327.1	NT	<i> Escherichia coli K12 MG1655 section 21/40 of the complete genome</i>
5140	15007	24778	1.06	0.0E+00	48845/74	NT	<i> Homo sapiens melanoma antigen, family C, 1 (MAGEC1), mRNA</i>
5159	15026	24783	0.98	0.0E+00	48845/74	NT	<i> Homo sapiens melanoma antigen, family C, 2 (MAGEC2), mRNA</i>
5162	15028	24784	1.59	0.0E+00	47536/67	NT	<i> Homo sapiens mannosidase, alpha, class 2A, member 1 (MANZAT1), mRNA</i>

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Table 4

Single Exon Profiles Expressed in Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST Value	Top Hit Assessment No.	Top Hit Database Source	Top Hit Descriptor
5165 15031	24797	1.12	0.0E+00	Alf245703.1	NT	Homo sapiens toll-like receptor 8 (TLR8) mRNA, complete cds	
5165 15031	24798	1.12	0.0E+00	Alf245703.1	NT	Homo sapiens toll-like receptor 8 (TLR8) mRNA, complete cds	
5166 15060	24814	1.72	0.0E+00	Alf030601.1	NT	Homo sapiens placental growth hormone (hGH-h3 (hGH-hV)) mRNA, complete cds	
5167 14013	23701	10.43	0.0E+00	4507720	NT	Homo sapiens ttn (TIN) mRNA	
5167 14013	23702	10.43	0.0E+00	4507720	NT	Homo sapiens ttn (TIN) mRNA	
5168 15062	24816	6.75	0.0E+00	4507720	NT	Homo sapiens ttn (TIN) mRNA	
5169 15056	1.38	0.0E+00	Alf163265.2	NT	Homo sapiens chromosome 21 segment H321C056		
5169 15056	24922	3.97	0.0E+00	4507720	NT	Homo sapiens ttn (TIN) mRNA	
5169 15056	24923	3.97	0.0E+00	4507720	NT	Homo sapiens ttn (TIN) mRNA	
5169 15056	24924	0.98	0.0E+00	4502398	NT	Homo sapiens beaded filament structural protein T, Menin (BFBP1)mRNA	
5208 15086	15.68	0.0E+00	Alf050303.1	NT	Homo sapiens acrosinase (ACO2) gene, nuclear gene encoding mitochondrial protein, exon 15		
5214 15137	24830	2.25	0.0E+00	Alf127285.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds	
5214 15137	24831	2.25	0.0E+00	Alf127286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds	
5226 15150	24977	2.59	0.0E+00	9256579	NT	Homo sapiens proteocadherin alpha 13 (PCDHA13).mRNA	
5224 15158	24928	3.82	0.0E+00	BEB91080.1	EST_HUMAN	[FC]-GNDG76-3T0800Z-GS5 GNbNaP Homo sapiens cDNA	
5238 15162	24930	3.12	0.0E+00	Alf182034.1	NT	Homo sapiens polycomb-like 2 protein (PCL2) mRNA, complete cds	
5238 15162	24931	3.12	0.0E+00	Alf182034.1	NT	Homo sapiens polycomb-like 2 protein (PCL2) mRNA, complete cds	
5245 15168	24946	1.92	0.0E+00	X581683.1	NT	H. sapiens immunophilin heavy chain gene, variable region	
5245 15168	24947	1.92	0.0E+00	X581683.1	NT	H. sapiens immunophilin heavy chain gene, variable region	
6307 15228	25032	5.8	0.0E+00	DE075468.1	EST_HUMAN	771006.1 NT_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3294280 3	
5308 15229	25033	1.77	0.0E+00	BE220763.1	EST_HUMAN	h16q2.11 NCI CGAP_L221 Homo sapiens cDNA clone IMAGE:3105194 3 similar to SW_Y054_HUMAN	
5309 15230	25034	1.97	0.0E+00	BE794421.1	EST_HUMAN	P24864 HYPOTHETICAL PROTEIN_KUA0054 .	
5309 15230	25035	1.97	0.0E+00	BE794421.1	EST_HUMAN	60168942561 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3649004 5'	
6311 15232	25037	5.46	0.0E+00	M26908.1	NT	Homo sapiens endopeptidase (EPP) gene, exon 7	
5313 15234	25038	1.81	0.0E+00	Alf170363.1	EST_HUMAN	ohBa09.v6 NCI CGAP_Kid6 Homo sapiens cDNA clone IMAGE:1417152 5' similar to gpBMT18512_G	
5319 15244	25044	6.42	0.0E+00	1142.058	NT	Homo sapiens Sm41 protease-activated receptor (PAR4).mRNA	
5324 15244	25044	2.91	0.0E+00	BP059962.1	EST_HUMAN	621168261 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3276254 5'	
6327 15247	25062	1.92	0.0E+00	BE539857.1	EST_HUMAN	62108144891 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3447839 5'	
6333 15253	25075	1.31	0.0E+00	HE2927284.1	EST_HUMAN	620105591 F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:328310 5'	
6337 15257	25080	1.8	0.0E+00	BF526328.1	EST_HUMAN	62027137271 NCI CGAP_Brig6 Homo sapiens cDNA clone IMAGE:4214272 5'	
6337 15257	25081	1.8	0.0E+00	BF526328.1	EST_HUMAN	62027137271 NCI CGAP_Brig6 Homo sapiens cDNA clone IMAGE:4214272 5'	
6348 15987	26122	1.71	0.0E+00	4557394	NT	Homo sapiens Bloom syndrome (BLM) mRNA	

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Single Exon Probes Expressed in Heart

Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal Value	Most Similar BLAST (Top) E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5352	15272	25101	5.24	0.0E+00	Af257797.1	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
6352	15272	25102	5.24	0.0E+00	Af257797.1	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5302	15282	25114	1.45	0.0E+00	D26555.1	NT	Human gene for dihydrodipoleme succinyltransferase, complete cds (exon 1-15)
5362	15282	25115	1.45	0.0E+00	D26555.1	NT	Human gene for dihydrodipoleme succinyltransferase, complete cds (exon 1-15)
5374	15284	25141	1.97	0.0E+00	11420816	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5366	15305	25189	3.26	0.0E+00	BF2529601.1	EST HUMAN	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5395	15308	25159	3.26	0.0E+00	BF2529601.1	EST HUMAN	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5399	15310	25161	2.35	0.0E+00	BF2513159.1	EST HUMAN	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5395	15315	25362	4.21	0.0E+00	11435392	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5420	15341	25405	2.43	0.0E+00	AV867515.1	EST HUMAN	MIR-SNOR3-78040-001-007 SNORD3-7803 Human capillaries cDNA
5431	15351	25405	3.05	0.0E+00	BE222896.1	EST HUMAN	601105251F1 NH_ MGC_15 Human capillaries cDNA clone IMAGE:2897803 5'
5431	15351	25405	3.05	0.0E+00	BE222896.1	EST HUMAN	601105251F1 NH_ MGC_15 Human capillaries cDNA clone IMAGE:2897803 5'
5444	15365	25420	1.31	0.0E+00	11420819	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5444	15365	25421	1.31	0.0E+00	11420819	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5451	15372	25429	6.35	0.0E+00	AF062254.1	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5451	15372	25430	6.35	0.0E+00	AF062254.1	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5455	15376	25455	2.9	0.0E+00	AJ224659.1	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5470	15390	25456	2.9	0.0E+00	AJ224659.1	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5474	15394	25459	6.69	0.0E+00	ME5719.1	EST HUMAN	EST-20235 Human capillaries cDNA
5489	15408	25471	3.67	0.0E+00	AV361977.1	EST HUMAN	UHM-BLD-actin-d-020-007 NIH_ MGC_37 Human capillaries cDNA clone IMAGE:3001658 5'
5489	15408	25472	5.74	0.0E+00	AV361977.1	EST HUMAN	PMS-C-070285-001/298-007-005 CT07033 Human capillaries cDNA
5489	15408	25472	5.74	0.0E+00	AV361977.1	EST HUMAN	PMS-C-070285-001/298-007-005 CT07033 Human capillaries cDNA
5489	15408	25472	5.74	0.0E+00	AV361977.1	EST HUMAN	PMS-C-070285-001/298-007-005 CT07033 Human capillaries cDNA
5491	15410	25475	1.88	0.0E+00	US26261.1	NT	Human heart, prostate, testis, whole blood mRNA, complete cds
5531	15448	28516	3.26	0.0E+00	AA169505.1	EST HUMAN	ZP9851111 Striated muscle, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5532	15449	28519	1.5	0.0E+00	AA000345.1	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5532	15449	28517	1.5	0.0E+00	AA000345.1	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5537	15454	28524	2	0.0E+00	AF076161.1	EST HUMAN	6012691 Human testis line cDNA library Human capillaries cDNA
5548	15464	28554	3.98	0.0E+00	11419801	NT	Human capillaries, heart, liver, lung, placenta, skeletal muscle, skin, testis, thymus, whole blood mRNA, complete cds
5555	15471	28542	6.76	0.0E+00	BE560021.2	EST HUMAN	6013491F1 NH_ MGC_ 8 Human capillaries cDNA clone IMAGE:3077843 5'
5556	15472	28543	1.59	0.0E+00	10048178	NT	Mus musculus acrosin mRNA
5557	15473	28544	3.03	0.0E+00	U86961.1	NT	Human L-type calcium channel beta-1B subunit (CACNB1) gene exon 13B and isoform beta-1B, complete cds

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal Value	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Human L-type calcium channel beta-1 subunit(GACN1B1) gene, exon 13B and isoform beta-1B, complete cds
55657	15473	25565	3.03	0.0E+00	U85969.1	NT	
55654	15480	25563	2.1	0.0E+00	BF530985.1	EST HUMAN	[65]23958272P-1 NH_ NCAP_564 Homo sapiens cDNA clone IMAGE-4184321 5'
55656	15482	25555	2.59	0.0E+00	BF277903.1	EST HUMAN	[60]110462P-1 NH_ MGIC_14 Homo sapiens cDNA clone IMAGE-3347463 5'
5574	15489	25556	1.74	0.0E+00	BF550905.1	EST HUMAN	[52]185852P-1 NH_ MGIC_45 Homo sapiens cDNA clone IMAGE-4310078 5'
55656	15500	25568	2.47	0.0E+00	BF217296.1	EST HUMAN	Homo sapiens cation channel (CDH2) mRNA, complete cds
55657	15511	25569	1.89	0.0E+00	BF282144.1	EST HUMAN	RCE-E022-2510004-022-610 EST0221Homo sapiens cDNA
55651	15515	25563	1.41	0.0E+00	BF550856.1	EST HUMAN	[50]1542287P-1 NH_ MGIC_55 Homo sapiens cDNA clone IMAGE-3503453 5'
55650	15520	25553	1.65	0.0E+00	BF530742.1	EST HUMAN	[50]1550005P-1 NH_ MGIC_56 Homo sapiens cDNA clone IMAGE-3227778 5'
55715	15530	25574	1.66	0.0E+00	BF133742.1	EST HUMAN	[50]1558505P-1 NH_ MGIC_57 Homo sapiens cDNA clone IMAGE-3217718 5'
55931	15545	25653	1.54	0.0E+00	W330165.1	EST HUMAN	[25]050165.1 Source:parathyroid, tumor, NBHPA. Homo sapiens cDNA clone IMAGE-321755 5'
55931	15545	25653	1.54	0.0E+00	W330956.1	EST HUMAN	[25]050165.1 Source:parathyroid, tumor, NBHPA. Homo sapiens cDNA clone IMAGE-321755 5'
55632	15548	25656	2.16	0.0E+00	AF012618.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 14
55931	15548	25656	3.57	0.0E+00	BE29107.1	EST HUMAN	[50]155857P-1 NH_ MGIC_21 Homo sapiens cDNA clone IMAGE-350323 5'
55358	15551	25552	2.74	0.0E+00	EE589910.1	EST HUMAN	Homo sapiens cDNA product: synaptic vesicle protein 2B (homolog (KIAA0735), mRNA
55449	15561	25654	1.63	0.0E+00	11432071	NT	Homo sapiens KIAA0735 gene product: synaptic vesicle protein 2B (homolog (KIAA0735), mRNA
55650	15650	25658	10.65	0.0E+00	9785996	NT	Homo sapiens potassium voltage-gated channel, Shaker-related subfamily, member 2 (KCND2), mRNA
55653	15574	25571	1.29	0.0E+00	AA198500.1	EST HUMAN	[24]010171 Source: HNMPu_S1 Homo sapiens cDNA clone IMAGE-005905 similar to SWY705_HUMAN_P42684 HYPOTHETICAL MYELOID CELL LINE PROTEIN 6. ;
55653	15574	25672	1.29	0.0E+00	AA198506.1	EST HUMAN	[24]000171 Source: HNMPu_S11 Homo sapiens cDNA clone IMAGE-005905 similar to SWY705_HUMAN_P42684 HYPOTHETICAL MYELOID CELL LINE PROTEIN 6. ;
55650	15589	25650	13.03	0.0E+00	U34655.1	NT	Harmen T cell surface glycoprotein CD-5 mRNA, complete cds
55730	15589	25661	13.03	0.0E+00	U34626.1	NT	Harmen T cell surface glycoprotein CD-5 mRNA, complete cds
55741	15649	25742	1.41	0.0E+00	AU137772	EST HUMAN	AU137772 P-LACE1 Homo sapiens cDNA clone PLACE100720/1 6'
5755	15683	26770	4.14	0.0E+00	AA203740.1	EST HUMAN	Harmen G protein coupled receptor GPR-9-6 gene, complete cds
5755	15683	26770	3.57	0.0E+00	U1545913	NT	[26]1545913 Source: HNK-1 leukocyte surface protein, complete cds
5755	15684	26771	3.57	0.0E+00	U1545913	NT	Homo sapiens glycosidase II (X72), mRNA
5775	15682	25772	2.8	0.0E+00	BE171573.1	EST HUMAN	[50]110852P-1 NH_ MGIC_15 Homo sapiens cDNA clone IMAGE-3350622 5'
5784	15690	28800	1.47	0.0E+00	U36580.1	NT	Human anion exchanger (AE1) gene, exons 1-20
5795	15701	28511	1.38	0.0E+00	U1453630	NT	Homo sapiens peptide transporter 3 (LOC31289), mRNA

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Single Exon Probes Expressed in Heart

Probe SEO ID No.	Exon SEO ID No.	ORF SEO ID No:	Expression Signal	Most Similar BLAST hit	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
68261	15732	289848	8.1	0.0E+00	AV650020	GLC Home sapiens cDNA clone GLCC00603	
68300	15739	289850	2.81	0.0E+00	AV15758568.1	EST HUMAN U1-HFB-BLU-acc-h-12Q-U1.1 Homo sapiens cDNA clone IMAGE:3086751.8	
68321	15738	289850	4.21	0.0E+00	AV255.1	EST HUMAN Y27650.1T Sorensen placenta cDNA clone IMAGE:449933.6	
6838	15740	289857	1.98	0.0E+00	X-5377.1	NT Human gene for the light and heavy chains of myeloperoxidase	
6843	15744	289852	4.28	0.0E+00	BE735896.1	EST HUMAN 6013035895-NH_1 NC_39 Homo sapiens cDNA clone IMAGE:36938918.6	
6843	15749	289853	4.25	0.0E+00	BE735896.1	EST HUMAN 6013035895-NH_1 NC_39 Homo sapiens cDNA clone IMAGE:36938918.6	
5847	15763	289896	11.57	0.0E+00	AV112425.1	EST HUMAN AU170245.1 HEMBA Homo sapiens cDNA clone HENBA:0015380.6	
6847	15753	289870	11.57	0.0E+00	AV112425.1	EST HUMAN AU170245.1 HEMBA Homo sapiens cDNA clone HENBA:0015380.6	
5848	15760	289878	1.55	0.0E+00	AV18942.1	EST HUMAN Av-25e37.1 NG_CGAP_G6_Homo sapiens cDNA clone IMAGE:24827920.3	
5865	15765	289882	4.81	0.0E+00	BE2535163.1	EST HUMAN 601108344F-NH_1 NC_15 Homo sapiens cDNA clone IMAGE:2887968.6	
6885	15765	289883	4.81	0.0E+00	BE2535163.1	EST HUMAN 601108344F-NH_1 NC_15 Homo sapiens cDNA clone IMAGE:2887968.6	
5901	15807	289851	1.36	0.0E+00	AV409548.1	EST HUMAN U1-HFB-BLU-acc-h-020-Q-U1.1 Homo sapiens cDNA clone IMAGE:3099381.6	
5901	15807	289852	1.36	0.0E+00	AV409548.1	EST HUMAN U1-HFB-BLU-acc-h-020-Q-U1.1 Homo sapiens cDNA clone IMAGE:3099381.6	
6921	15820	289851	1.98	0.0E+00	AV171944.1	EST HUMAN AV171944.1 GLC Homo sapiens cDNA clone GLCECH006.6	
6930	15835	289888	2.24	0.0E+00	AF103880.1	NT Human ciliopathy cDNA clone IMAGE:21784169.6 similar to alpha catenin, complete cds	
6938	15841	289884	3.45	0.0E+00	AV163840.1	EST HUMAN au1708.1 Schmidauer fetal brain 00004 Homo sapiens cDNA clone IMAGE:21784169.6 similar to au1708.1 Schmidauer fetal brain 00004 Homo sapiens cDNA clone IMAGE:21784169.6	
6938	15841	289885	3.46	0.0E+00	AV163840.1	EST HUMAN au1708.1 Schmidauer fetal brain 00004 Homo sapiens cDNA clone IMAGE:21784169.6 similar to au1708.1 Schmidauer fetal brain 00004 Homo sapiens cDNA clone IMAGE:21784169.6	
6951	15850	289778	4.79	0.0E+00	BE798873.1	EST HUMAN 6011612088F1-NH_1 NC_7 Homo sapiens cDNA clone IMAGE:3941847.6	
5955	15860	289851	7.23	0.0E+00	BE5888913.1	EST HUMAN 6011612088F1-NH_1 NC_7 Homo sapiens cDNA clone IMAGE:3913311.6	
6955	15860	289882	7.23	0.0E+00	BE5888913.1	EST HUMAN 6011612088F1-NH_1 NC_7 Homo sapiens cDNA clone IMAGE:3913311.6	
6961	15860	289888	3.71	0.0E+00	BE4485.1	NT Human antigen C27 gene, exons 1-2	
5904	15869	289891	2.16	0.0E+00	AL165204.2	NT Homo sapiens chromosome 21 segment HS21:CO04	
5970	15875	289892	2.15	0.0E+00	AL165204.2	NT Homo sapiens zona pellucida glycoprotein 3A (sperm receptor)/(ZP3A), mRNA	
5970	15875	289898	3.54	0.0E+00	600983.NT	NT5111.X1 NCI_CGAP_G68 Homo sapiens cDNA clone IMAGE:20424513.3 similar to SW_WINT3_MOUSE	
6973	15877	289891	4.13	0.0E+00	AE98412.1	EST HUMAN P17555_WNT-13 PRO70-ONCOGENIC PROTEIN PRECURSOR;	
6974	15878	289802	1.79	0.0E+00	LS2852.1	NT Homo sapiens zinc finger homeodomain protein (A/B-1), mRNA, complete cds	
6980	15885	289807	3.58	0.0E+00	AA34585.1	EST HUMAN LN62620.1 Searle AA34585.1 Homo sapiens cDNA clone IMAGE:773086.6	
5901	15890	289819	1.48	0.0E+00	BE22857.6	EST HUMAN CIV3-BND0047 3009800-775-c06 BN0047 Homo sapiens cDNA	
6011	15910	289844	1.44	0.0E+00	AL126208.1	EST HUMAN AU170852.8 T2RMAN Homo sapiens cDNA clone N1 TRMAN02493.6	
6041	15944	289776	7.44	0.0E+00	EE169731.1	EST HUMAN FM8-H10520-3020-0325-008 HT020 Homo sapiens cDNA	

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Table 4

Single Exon Proteins Expressed in Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6042	15645	250777	0.0E+00	0.0E+00 AAU07651.1	EST_HUMAN	IL6-CN10032-1600021-145-307	Homo sapiens cDNA clone MAGE-S27/292 5'
6053	15646	251191	1.81	0.0E+00 AAU07651.1	EST_HUMAN	223816031-111 Striataline-Hu cell s3.537216 Homo sapiens cDNA clone MAGE-S27/292 5'	
6071	16054	240201	3.16	0.0E+00 AAU07651.1	EST_HUMAN	IL6-CN10032-1600021-145-307	Homo sapiens cDNA clone MAGE-S27/292 5'
6074	16054	240202	6.08	0.0E+00 AAU06021.1	EST_HUMAN	IL3-ST0024-2307590-001-1601 ST00241 Homo sapiens cDNA	
6076	16056	262639	0.08	0.0E+00 AAU06021.1	EST_HUMAN	IL3-ST0024-2307590-001-1601 ST00241 Homo sapiens cDNA	
6094	16104	24887	3.07	0.0E+00 AAU06021.1	EST_HUMAN	Homo sapiens C6 antigen (C6), mRNA	
6099	15659	24872	1.98	0.0E+00 BE5563891.1	EST_HUMAN	65N-59 Human cDNA clone [MAGE-S26/267] 5'	
6099	15659	24873	13.15	0.0E+00 BE5563891.1	EST_HUMAN	65N-59 Human cDNA clone [MAGE-S26/267] 5'	
6101	15695	28130	2.07	0.0E+00 BE5561621.1	EST_HUMAN	754833-X1 NC_01_CGAP_L24 Homo sapiens cDNA clone MAGE-S22/261 3' similar to SW_5CG5_HUMAN	
6101	15695	26131	2.07	0.0E+00 BE5561621.1	EST_HUMAN	(CG8779_GCLIN-96; ;	
6118	16012	26150	1.46	0.0E+00 BE5563761.1	EST_HUMAN	CAM-HT00877-00000-097-211 HT00877_Homo sapiens cDNA	
6121	16015	26153	3.84	0.0E+00 AAU196105.1	EST_HUMAN	-3-p03-11 States_NIHmL-51 Homo sapiens cDNA clone MAGE-005332 5'	
6126	15673	15673	10.28	0.0E+00	EST_HUMAN	Homo sapiens calmodulin (calmodulin-associated protein), delta 2 (nuclear paleoplakin-related arm-repeat protein) (CTNNICD), mRNA	
6135	15682	26116	2.57	0.0E+00 BF556065.1	EST_HUMAN	6021885852F1 NIH-MYC_46 Homo sapiens cDNA clone [MAGE-43]0076 5'	
6142	15690	232	2.32	0.0E+00 A030989.1	NT	Human MYC2 gene, complete cds	
6143	16019	26167	2.8	0.0E+00 AF217298.1	NT	Homo sapiens cdk2n1 20 (CDK20) mRNA, complete cds	
6146	16019	26168	2.8	0.0E+00 AF217299.1	NT	Homo sapiens cdk2n1 20 (CDK20) mRNA, complete cds	
6154	15112	24876	2.75	0.0E+00	EST_HUMAN	Homo sapiens melanoma antigen, family 2 (MAGEB2), mRNA	
6168	15125	24842	6.69	0.0E+00 BE252941.1	EST_HUMAN	601148054F1 NIH-MYC_19 Homo sapiens cDNA clone [MAGE-35]01829 5'	
6168	15126	24842	2.32	0.0E+00 C237976.1	NT	H. sapiens mRNA for latent transforming growth factor-beta-binding protein (LTBP-2)	
6169	15126	24844	2.32	0.0E+00 C237976.1	NT	H. sapiens mRNA for latent transforming growth factor-beta-binding protein (LTBP-2)	
6170	15127	24845	2.83	0.0E+00 AF257737.1	NT	Homo sapiens ciliary cytoskeleton heavy chain 9 (DNAH9) mRNA, complete cds	
6170	15127	24846	2.83	0.0E+00 AF257737.1	NT	Homo sapiens ciliary cytoskeleton heavy chain 9 (DNAH9) mRNA, complete cds	
6176	15132	24881	1.35	0.0E+00 AF31051.1	NT	Homo sapiens NALP1 mRNA, complete cds	
6178	16064	26213	2.18	0.0E+00 BF556065.1	EST_HUMAN	61271885852F1 NIH-MYC_46 Homo sapiens cDNA clone [MAGE-43]0076 5'	
6181	16067	26217	3.58	0.0E+00 BF19781.1	NT	Luminescent channel signal peptide (LSPN) gene, exon 19	
6180	16076	26224	6.61	0.0E+00 BF309896.1	EST_HUMAN	6011886023F1 NIH-MYC_17 Homo sapiens cDNA clone IMAGE-4123946 5'	
6183	16078	26227	1.78	0.0E+00 U41302.1	NT	Human chromosome 16 creatine transporter (SLC6A8) and (CDM) paralogous genes, complete cds	
6225	16091	26241	1.34	0.0E+00 A064606.1	EST_HUMAN	EST-396878 MAGE-1 sequences, MAGC-Homo sapiens cDNA	
6226	16092	26242	1.41	0.0E+00 BE25403.1	EST_HUMAN	60119868F1 NIH-MYC_19 Homo sapiens cDNA clone IMAGE-3354566 5'	

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) HU BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6237	16103	26263	5.9	0.E+00	AU1193213.1	EST_HUMAN	AU133213 NTFRP4 Homo sapiens cDNA clone NT2R8P401061565 6'
6231	16119		2.44	0.E+00	AU1193213.1	EST_HUMAN	AU1437069 MGC_72 Homo sapiens cDNA clone Y76AA10023265 5
6200	16126	26279	1.31	0.E+00	EE8601286.1	EST_HUMAN	6014318159E1 NIH_3T3 NIH_MCG_77 Homo sapiens cDNA clone IMAGE-38971164 5
6220	16126	26286	1.31	0.E+00	EE8601286.1	EST_HUMAN	6014318159E1 NIH_3T3 NIH_MCG_77 Homo sapiens cDNA clone IMAGE-38971164 5
6273	16137	24830	1.97	0.E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
							Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR) mRNA
6226	16150	26306	3.63	0.E+00	AF137286.1	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR) mRNA
6226	16150	26306	3.63	0.E+00	114586999	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR) mRNA
							cc0747.21 Scaurus, placenta fibroblast, 2NbbP1680 Homo sapiens cDNA clone IMAGE-7114944 3
							similar to SW-ARS2_HUMAN P51680 ARYSULFATASE D PRECURSOR; contains element HCR repetitive element;
							cc0747.21 Scaurus, placenta fibroblast, 2NbbP1680 Homo sapiens cDNA clone IMAGE-7114944 3;
							similar to SW-ARS2_HUMAN P51680 ARYSULFATASE D PRECURSOR; contains element HCR repetitive element;
6302	16166	26323	26.51	0.E+00	AU1128344.1	EST_HUMAN	Homo sapiens myoD, heavy polypeptide 8, skeletal muscle, prenatal (MMY8), mRNA, A
6302	16166	26324	26.51	0.E+00	AU128344.1	EST_HUMAN	cc0747.21 Scaurus, placenta fibroblast, 2NbbP1680 Homo sapiens cDNA clone IMAGE-7114944 3;
6304	16168	26326	18.73	0.E+00	114263522	NT	Homo sapiens myoD, heavy polypeptide 8, skeletal muscle, prenatal (MMY8), mRNA, A
6304	16168	26327	18.73	0.E+00	114263522	NT	Homo sapiens myoD, heavy polypeptide 8, skeletal muscle, prenatal (MMY8), mRNA, A
6306	16170		14.06	0.E+00	BF3257975.1	EST_HUMAN	602035059E1 NCI CCAP 8m64 Homo sapiens cDNA clone IMAGE-4182856 5'
6308	16172	26329	5.1	0.E+00	AA128453.1	EST_HUMAN	276009611 Striatal muscle 83/209 Homo sapiens cDNA clone IMAGE-662201 5' similar to TR-G300562
6328	16191	26353	6.72	0.E+00	AF056213.1	NT	cc06562_NELA_N..
6328	16191	26354	6.72	0.E+00	AF056213.1	NT	Homo sapiens amyloid 1 (ANK1) mRNA, complete cds
6328	16190	26350	7.55	0.E+00	XG0172.1	NT	Homo sapiens DNA for ZNGF2 pseudogene, exon 4
6337	16200	26380	11.09	0.E+00	U5648.1	NT	Human P2x1 receptor mRNA, complete cds
6339	16202	26382	11.09	0.E+00	U5648.1	NT	Human P2x1 receptor mRNA, complete cds
6339	16202	26393	11.09	0.E+00	AV989680.1	EST_HUMAN	EST3626286 IMAGE resequencing, MAGO_Homo sapiens cDNA
6347	16210	263972	1.43	0.E+00	AV989680.1	EST_HUMAN	EST3626286 IMAGE resequencing, MAGO_Homo sapiens cDNA
6349	16212	26374	2.54	0.E+00	AV989681.1	EST_HUMAN	2639465.y1 NCI CGAP L101 Homo sapiens cDNA clone IMAGE-26780840 5' similar to TR-Q080650 Q096050
6349	16251	26411	1.67	0.E+00	AV29426.1	EST_HUMAN	HNF3FH TRANSSCRIPTION FACTOR GENES;
6400	16251		1.5	0.E+00	AU117563.1	EST_HUMAN	AU17563 HEMLA Homo sapiens cDNA clone IMAGE-002561 5'
6401	16262	26422	3.94	0.E+00	11427135. NT	NT	Homo sapiens glucagon-like peptide 2 receptor (GLP-2R), mRNA
6411	16272	26434	54.65	0.E+00	AA1211653.1	EST_HUMAN	27600211 Striatal muscle 83/209 Homo sapiens cDNA clone IMAGE-662203 5' similar to dP-03740
6462	16521	26466	4.25	0.E+00	AU175650.1	EST_HUMAN	cn1705.1 Name Human Tracheal Bone Cells Homo sapiens cDNA clone NHTBC_cn1705.1 random

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Probe Seq ID No.:	ORF Seq ID No.:	Expression Signal	Meet Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6462 16321	28487	4.25	0.0E+00	AJ752051.1	EST_HUMAN	gn 17d65_x1 Normal Human Tracheolar Bone Cells Human sapheus cDNA clone NH TBc_cn 17d65_m00m
6466 16358	26530	1.59	0.0E+00	AJ604205.1	INT	Human sapiens dynamin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete cds
6459 16356	26551	1.59	0.0E+00	AJ604205.1	INT	Human sapiens dynamin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete cds
6515 16374	26551	1.3	0.0E+00	11417342	INT	Human sapiens sema domain, seven transmembrane repeats [type 1 and type 1-like], transmembrane domain (TM) and short cytosolic domain, (Germiphore) 5A (SEMA5A), mRNA
6550 16380	26559	1.98	0.0E+00	6612735 INT	Human sapiens transmembrane receptor, polypeptide chain 5 (TRPC5), mRNA	
6534 16392	26571	5.37	0.0E+00	BF727905.1	EST_HUMAN	60 1884685 F NH TMC_57 Human sapiens cDNA clone IMAGE-4108729 5'
6539 16397	26576	2.98	0.0E+00	AU1298622_1	EST_HUMAN	AU 1298622_NTRP2 Human sapiens cDNA clone N T2RP2 20056193 5'
6650 16408	26586	6.49	0.0E+00	480-8481NT	Human sapiens ATP-binding cassette, sub-family A (ABCA) member 3 (ABCA3), mRNA	
6555 16413	26590	4.97	0.0E+00	BF739870.1	EST_HUMAN	60 1560156 1 NH TMC_9 Human sapiens cDNA clone IMAGE-5947385 5'
6555 16413	26591	4.97	0.0E+00	BF739870.1	EST_HUMAN	60 1560156 1 NH TMC_9 Human sapiens cDNA clone IMAGE-5947385 5'
6556 16414	26592	60.88	0.0E+00	AU129424.1	EST_HUMAN	AU 129424_HMBH1 Human sapiens cDNA clone HMBH1 0003655 5'
6574 16432	26653	60.88	0.0E+00	AU129424.1	EST_HUMAN	AU 129424_HMBH1 Human sapiens cDNA clone HMBH1 0003655 5'
6574 16432	26654	1.52	0.0E+00	BF787610.1	EST_HUMAN	60 1461713 1 NH TMC_68 Human sapiens cDNA clone IMAGE-3884258 5'
6622 16502	26695	1.29	0.0E+00	AA146791.1	EST_HUMAN	60 1487713 1 NH TMC_58 Human sapiens cDNA clone IMAGE-3884258 5'
6615 16525	26719	3.72	0.0E+00	BF780466.1	EST_HUMAN	60 1306658 F NH TMC_39 Human sapiens cDNA clone IMAGE-566410 5'
6654 16534	26729	3.97	0.0E+00	N34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
6654 16534	26730	3.97	0.0E+00	N34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
6674 16554	26749	1.65	0.0E+00	AA139756.1	EST_HUMAN	28104-17 Shallowe satzlerian S11 Human sapiens cDNA clone IMAGE-728711 5' similar to TFR G000482
6677 16557	26750	7.54	0.0E+00	AU124202.1	EST_HUMAN	63030482_POLYREVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
6688 16558	26751	8.73	0.0E+00	BF763086.1	EST_HUMAN	AU 124202_778AA1 Human sapiens cDNA clone Y78AA1 0002277 5'
6714 16594	26753	1.96	0.0E+00	AL1202124.1	EST_HUMAN	60 2153008 F NH TMC_81 Human sapiens cDNA clone IMAGE-54294128 5'
6714 16594	26754	1.96	0.0E+00	AL1202124.1	EST_HUMAN	DIN 2761PI092_1 1761 synomonic; ham2/Homo sapiens cDNA clone DK 2761PI092_5'
6732 16610	26755	1.31	0.0E+00	BF777683.1	EST_HUMAN	DK 2761PI092_1 1761 synomonic; ham2/Homo sapiens cDNA clone IMAGE-3887735 5'
6742 16621	26810	1.35	0.0E+00	AW157203.1	EST_HUMAN	UL-HF-BNO-8k-14-11-1 NH TMC_50 Human sapiens cDNA clone IMAGE-3077406 5'
6747 16626	26813	14.35	0.0E+00	AE145697.1	EST_HUMAN	TR 06462-2 DQ46463 TYPE-2 PHOSPHATIDIC ACID HYDROLASE, [1];
6775 16654	26842	1.16	0.0E+00	BF145597.1	EST_HUMAN	60 1578198 F NH TMC_9 Human sapiens cDNA clone IMAGE-3926056 5'
6776 16651	26843	1.16	0.0E+00	BF145597.1	EST_HUMAN	60 1578198 F NH TMC_9 Human sapiens cDNA clone IMAGE-3926056 5'

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Probe Seq ID NC:	Exon Seq ID NO:	ORF Seq ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
Probe sequences Xg pseudodautosomal region, segment 1/2							
6733	16652	28882	2.72	0.E+00	A 271753.1	NT	Homo sapiens Xg pseudodautosomal region, segment 1/2
6810	16659	28878	2.2	0.E+00	B 674157.1	EST_HUMAN	7d7f6aa1x1 NC_ CGAP_Lu24 Homo sapiens cDNA clone IMAGE:242708452 3' similar to TR 096704 096704
8811	16650	28879	1.36	0.E+00	A 885671.1	EST_HUMAN	w16b610_x1 NC_ CGAP_Brc1 Homo sapiens cDNA clone IMAGE:24282753 3' similar to SW CGDT_HUMAN MATRIX METALLOPROTEINASE-14 PRECURSOR ;
8817	16656	28887	1.31	0.E+00	B 5539560.1	EST_HUMAN	601 334790 1 NIH_ MGCC_39 Homo sapiens cDNA clone IMAGE:3888955 5'
8817	16656	28888	1.31	0.E+00	B 5539560.1	EST_HUMAN	601 334790 1 NIH_ MGCC_39 Homo sapiens cDNA clone IMAGE:3888955 5'
6824	16703	28887	1.44	0.E+00	A 27225	NT	Homo sapiens Checken-Higuchi syndrome 1 (CHS1), mRNA
6824	16703	28888	1.44	0.E+00	A 27225	NT	Homo sapiens Checken-Higuchi syndrome 1 (CHS1), mRNA
6851	16730		3.89	0.E+00	A A398511.1	EST_HUMAN	z173a08_b1 Score= 0.005 NT Homo sapiens cDNA clone IMAGE:7279583 3' similar to gpb SB56555
6852	16735	28628	1.45	0.E+00	A V354674.1	EST_HUMAN	PRROHIBITIN (HUMAN); QV2-DT0045-221289-045-027 D70045
6852	16735	28629	1.45	0.E+00	A V354674.1	EST_HUMAN	F1 Homo sapiens cDNA clone cDNA
6858	16743	28642	1.21	0.E+00	B E512586.1	EST_HUMAN	QV2-DT0045-221289-045-027 D70045
6866	16748	28643	1.21	0.E+00	B E512586.1	EST_HUMAN	cDNA
6870	16758	28656	1.26	0.E+00	A L165209.2	NT	601 452421F1 NIH_ MGCC_ 86 Homo sapiens cDNA clone IMAGE:3886179 5'
6870	16758	28657	1.25	0.E+00	A L165209.2	NT	Homo sapiens chromosome 21 segment HS21C000
6889	16778	28657	2.01	0.E+00	B E501077.1	EST_HUMAN	601 452421F1 NIH_ MGCC_ 72 Homo sapiens cDNA clone IMAGE:3816860 5'
6913	16791	28654	2.4	0.E+00	A 758695	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 13 (MAP3K13), mRNA
6913	16791	28655	2.4	0.E+00	A 758695	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 13 (MAP3K13), mRNA
6945	16833	27028	2.85	0.E+00	X 09622.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
6955	16833	27027	2.85	0.E+00	X 09622.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
6955	16833	27028	2.85	0.E+00	X 09622.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
6993	16870		1.36	0.E+00	A W51383.1	EST_HUMAN	probe1_x1 NC_ CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2707023 3' similar to gpb M14123_cds4
6995	16872	27063	3.64	0.E+00	D 52650.1	EST_HUMAN	RE TROVIRUS-RELATED POLYPROTEIN (HUMAN); H UM88402CB_Creberin human fetal brain polyA+ mRNA (#5355) Homo sapiens cDNA clone GEN:084C02
7011	16889	27061	4.46	0.E+00	E E774945.1	EST_HUMAN	65123644951 NIH_ MGCC_ 44 Homo sapiens cDNA clone IMAGE:3867098 5'
7015	16892	27063	1.31	0.E+00	A A510245.1	EST_HUMAN	5026501_x1 Score= 0.001 Lu24 Homo sapiens cDNA clone IMAGE:274082 5'
7015	16893	27068	4.32	0.E+00	B F313846.1	EST_HUMAN	601 905071F1 NIH_ MGCC_ 50 Homo sapiens cDNA clone IMAGE:2427444 5'
7021	16898	27069	1.41	0.E+00	A W59673.1	EST_HUMAN	601 81146-12-0-0 1-1 NCI CGAP_SabDab Homo sapiens cDNA clone IMAGE:2717687 3'
7038	16916	27104	2.39	0.E+00	B E69227.1	EST_HUMAN	601 305051F1 NIH_ MGCC_ 19 Homo sapiens cDNA clone IMAGE:3868936 5'
7040	16817	27106	1.83	0.E+00	B F01195.1	EST_HUMAN	602127684F1 NIH_ MGCC_ 56 Homo sapiens cDNA clone IMAGE:4284542 5'

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal Value	Most Similar (Top) HR BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7040	15917	27107	1.83	0.0E+00	BF700165.1	EST_HUMAN	002172954-E1 NIH MCG_56 Homo sapiens cDNA clone IMAGE:22824642 5
7050	15927	27108	1.83	0.0E+00	BF700165.1	EST_HUMAN	002172954-E1 NIH MCG_56 Homo sapiens cDNA clone IMAGE:22824642 5
7069	16946	27137	6.35	0.0E+00	AAB2927.1	EST_HUMAN	002172954-E1 NIH MCG_56 similar D9B:M38072 60S PROSOCIAL PROTEIN 1A (HUMAN)
7073	16950	27142	3.54	0.0E+00	10947037	NT	Homo sapiens ankyrin 1, erythrocite (ANK1), transcript variant 1, mRNA
7073	16950	27143	3.54	0.0E+00	10947037	NT	Homo sapiens ankyrin 1, erythrocite (ANK1), transcript variant 1, mRNA
7088	15925	27150	1.28	0.0E+00	YI1107.3	NT	Homo sapiens ITGB6 gene for integrin beta 6 subunit; exons 3-41
7095	16972	-1.45	0.0E+00	AII71857.1	EST_HUMAN	AV71857.1 FHT HMB sapiens cDNA clone PHT(BA)T-1 6	
7098	16976	27159	3.64	0.0E+00	AV137277.1	EST_HUMAN	W73007.1 NCI CGAP Pan Hmbo sapiens cDNA clone IMAGE:28330443 3' similar to gb:X63887 INTEGRIN BETA-4 SUBUNIT PRECURSOR (HUMAN).
7102	16979	27171	1.57	0.0E+00	AU174051.1	EST_HUMAN	AU174051.1 2N2M1 Hmbo sapiens cDNA clone X72RM2/01575 5'
7147	17024	27218	2.84	0.0E+00	A807023.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
7148	17025	27219	4.41	0.0E+00	A189223.1	EST_HUMAN	14454609_xL_Scores_NFL_T_GBC_S1 Hmbo sapiens cDNA clone IMAGE:28350593 3'
7148	17025	27220	4.41	0.0E+00	A189223.1	EST_HUMAN	DK724-34C181_5f_43 (synonym: hsec); Homo sapiens cDNA clone DK724-34C181_3'
7176	17093	27241	2.84	0.0E+00	AL040428.1	EST_HUMAN	DK724-34C181_5f_43 (synonym: hsec); Homo sapiens cDNA clone DK724-34C181_3'
7178	17083	27242	2.84	0.0E+00	AL040428.1	EST_HUMAN	Homo sapiene killer inhibitory receptor 2B-1 (KIR2B1) and killer inhibitory receptor 2B-2 (KIR2B2) genes, partial cds
7177	17064	27243	1.17	0.0E+00	AFC38001.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
7198	17075	27261	3.97	0.0E+00	AB050545.1	NT	Homo sapiens tumor protein p73 (TP73) mRNA
7204	17081	27268	1.25	0.0E+00	K01241.1	NT	Human Ig rearranged J-chain apoprotein-3 pseudogene, constant region
7227	17084	27272	2.65	0.0E+00	AB020690.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
7227	17084	27273	2.65	0.0E+00	AB020690.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
7210	17087	27277	1.96	0.0E+00	A1766785.1	EST_HUMAN	AV860739 GLC_Hmbo sapiens cDNA clone GLCCKG12_3'
7213	17090	27280	3.43	0.0E+00	7706585	NT	Homo sapiens polygalactin-1 (PROG1), mRNA
7231	17108	27286	3.99	0.0E+00	BE315622.1	EST_HUMAN	601141119E1 NIH MOC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
7231	17108	27289	3.86	0.0E+00	BE315622.1	EST_HUMAN	601141119E1 NIH MOC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
7241	17118	27313	1.91	0.0E+00	X47028.1	NT	Hmbo mRNA for GABAR-A receptor, alpha 1 subunit
7250	17127	27320	2.12	0.0E+00	AIB54607.1	EST_HUMAN	Wd4472X1 NCI CGAP_GCR Homo sapiens cDNA clone IMAGE:2473150 3' similar to SW-MGB3_HUMAN
7254	17131	27324	4.49	0.0E+00	9256505	NT	Homo sapiens melanoma-associated antigen E3;
7263	17149	27333	1.54	0.0E+00	AV685831.1	EST_HUMAN	EST1370381 MAGE sequence, MAGE_Hmbo sapiens cDNA
7269	17146	27340	1.49	0.0E+00	6635467	NT	Human endogenous retrovirus, complete genome
7280	17157	27352	0.88	0.0E+00	11459695	NT	Hmbo sapiens MAP-kinase activating death domain (MADD), mRNA

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Single Exon Probes Expressed in Heart

Probe SEQ ID No.	Exon SEQ ID No.	ORF Seq ID NC:	Expression Signal	Most Similar (Top BLAST E Value)	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7250	17166	27365	1.44	0<=+00	AB011150.1	NT	Human ciliopathy mRNA for KIAA0579 protein, partial cds [001585249-1 NIH_3T3 clone cDNA clone IMAGE:23043463 5'
7251	17167	27365	2.56	0<=+00	B5794823.1	EST_HUMAN	Human ciliopathy mRNA for KIAA0579 protein, partial cds [001585247-1 NIH_3T3 clone cDNA clone IMAGE:23043463 5'
7256	17174	27374	1.24	0<=+00	B5853643.1	EST_HUMAN	601156247-1 NIH_3T3 clone cDNA clone IMAGE:2319865 5'
7258	17174	27375	1.24	0<=+00	B5853643.1	EST_HUMAN	601156247-1 NIH_3T3 clone cDNA clone IMAGE:2319865 5'
7308	17184	27383	1.6	0<=+00	AA344001.1	EST_HUMAN	EST50000_Gal blader 1 Human ciliopathy mRNA species cDNA 5' end [001585248-1 NIH_3T3 clone cDNA clone IMAGE:2325375 5' similar to gb:L38049 Mus musculus
7308	17184	27384	1.6	0<=+00	AA344001.1	EST_HUMAN	EST50000_Gal blader 1 Human ciliopathy mRNA species cDNA 5' end [001585248-1 NIH_3T3 clone cDNA clone IMAGE:2325375 5' similar to gb:L38049 Mus musculus
7360	17227	27426	1.38	0<=+00	BB207063.1	EST_HUMAN	Bad_mRNA, complete cds (MOUSE); [002251507-1 NCBI_Cat67 Human ciliopathy mRNA clone IMAGE:4168300 5'
7360	17227	27427	1.38	0<=+00	BB207063.1	EST_HUMAN	Bad_mRNA, complete cds (MOUSE); [002251507-1 NCBI_Cat67 Human ciliopathy mRNA clone IMAGE:4168300 5'
7368	17346	27651	2.71	0<=+00	BB134013.1	EST_HUMAN	Q02251607-1 NCBI_Cat67 Human ciliopathy mRNA species cDNA
7383	17252	27457	3	0<=+00	BB134013.1	EST_HUMAN	QV2-HIT0686-260700-285-2-008 HT10985 Human ciliopathy mRNA species cDNA
7406	17273	27419	11.81	0<=+00	ALC42278.1	EST_HUMAN	DK-Z0454-0120_11_424 (synonym: hsc70) Human ciliopathy mRNA species cDNA clone [IMAGE:1051249-3 0% 5'
7425	17292	27503	1.27	0<=+00	AL089483.1	EST_HUMAN	Q96D1_V1 Saws_NSF_F8_P8_OT_P_A_P_S1 Human ciliopathy mRNA clone [IMAGE:1051249-3 similar to RQ14877_Q1_1407_KIAA0171 PROTEIN]; [RQ14877_Q1_1407_KIAA0171 PROTEIN];
7426	16442	268320	2.06	0<=+00	116901151	NT	Human ciliopathy C242 zinc finger protein FL_12195041 [FL_12195041] mRNA
7426	16442	268320	2.06	0<=+00	116901151	NT	Human ciliopathy C242 zinc finger protein FL_1225624 [FL_1225624] mRNA
7431	16444	26952	8.96	0<=+00	A1260909.1	EST_HUMAN	Q96D60_X1 NCBI_Cat67 Human ciliopathy mRNA clone IMAGE:1051249-3 similar to SWI_RL2B_HUMAN
7431	16444	26953	8.86	0<=+00	A1260909.1	EST_HUMAN	P26116_RS9_RIBOSOMAL_PROTEIN_L2A_;
7432	16445	26954	1.69	0<=+00	AV1639356.1	EST_HUMAN	EST356020_MAGE_redundancies, MAGE-2 Human ciliopathy mRNA [P26116_RS9_RIBOSOMAL_PROTEIN_L2A_];
7450	17259	27484	3.92	0<=+00	A17654466.1	NT	Human ciliopathy disease 2-like protein [PCG2L] gene, exon 8 [601156250-1 NIH_3T3 clone IMAGE:23567225 5'
7461	17221	27621	4.9	0<=+00	BB756291	EST_HUMAN	601156250-1 NIH_3T3 clone cDNA clone IMAGE:23567225 5'
7463	17223	27628	1.37	0<=+00	BB71382.1	EST_HUMAN	601498262-1 NIH_3T3 clone cDNA clone IMAGE:3870007 5'
7464	17224	27531	7.21	0<=+00	AV163778.1	EST_HUMAN	mbf504_V1 Schmidauer fetal brain 00004 Human ciliopathy mRNA clone IMAGE:27883142 5' similar to dr:NM_003702
7475	17353	21644	2.86	0<=+00	B585249-1	EST_HUMAN	601146542-1 NIH_3T3 clone cDNA clone IMAGE:2316477 5'
7488	17558	27682	3.98	0<=+00	C06158.1	EST_HUMAN	008158 Human pancreatic beta cell Human ciliopathy mRNA clone IMAGE:2305656
7488	17558	27683	3.98	0<=+00	C06158.1	EST_HUMAN	008158 Human pancreatic beta cell Human ciliopathy mRNA clone IMAGE:2305656
7490	17260	27689	3.22	0<=+00	BB748215.1	EST_HUMAN	[601156263-1 NIH_3T3 clone cDNA clone IMAGE:2327548-5 5'
7490	17260	27694	1.93	0<=+00	BB748215.1	EST_HUMAN	Human ciliopathy solute carrier family 21 (organic anion transporter) member 9 (SLC27A9) mRNA
7498	17369	21659	1.93	0<=+00	BB748221	EST_HUMAN	Human ciliopathy solute carrier family 21 (organic anion transporter) member 9 (SLC27A9) mRNA

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Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7499	27576	17369	1.93	0.0E+00	BE305461.1	EST_HUMAN	Hom sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
7514	17362	27569	1.47	0.0E+00	BE305461.1	EST_HUMAN	BE305461.1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3063256
7530	17381	27561	2.59	0.0E+00	AF019084.1	NT	Hom sapiens leucine zipper kinase 2B (KLF2B) gene, complete cds
7530	17381	27562	2.59	0.0E+00	AF019084.1	EST_HUMAN	Hom sapiens leucine zipper kinase 2B (KLF2B) gene, complete cds
7549	17399	27612	1.47	0.0E+00	BE012877.1	EST_HUMAN	RC2270642-130302017-001 BT0542 Homo sapiens cDNA
7550	17410	27620	1.76	0.0E+00	AV600285.1	EST_HUMAN	UH-BNC-36g-E-1-242-U11 NH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943
7559	17410	27627	1.76	0.0E+00	AV600285.1	EST_HUMAN	UH-BNC-36g-E-1-242-U11 NH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943
7563	17414	27620	1.25	0.0E+00	AF028598.1	NT	Hom sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families
7563	17414	27630	1.25	0.0E+00	AF028598.1	NT	Hom sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families
7560	17451	27645	2.45	0.0E+00	AV600282.1	EST_HUMAN	UH-F-BNC-36g-E-07-U-11 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077351
7607	17458	27673	1.34	0.0E+00	AF028598.1	NT	Multiple endocrine-associated retrovirus polypeptide (pcr) mRNA, partial cds
7621	17472	27691	2.56	0.0E+00	S748465.1	NT	AI/G-androgen-induced growth factor AI/G human, placenta, Genomic/mRNA, 486 nt, segment 5 of 5
7621	17472	27692	2.56	0.0E+00	S748465.1	NT	AI/G-androgen-induced growth factor AI/G human, placenta, Genomic/mRNA, 486 nt, segment 5 of 5
7622	17473	27693	2.57	0.0E+00	BE560320.1	EST_HUMAN	BE560320.1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3089890
7630	17491	27701	1.62	0.0E+00	AV361381.1	EST_HUMAN	CA2-C-70311-301198-034-111 C170311 Homo sapiens cDNA
7630	17500	27722	2.17	0.0E+00	AV132349.1	EST_HUMAN	AU132349 NT2R3 Homo sapiens cDNA clone NT2R3-3004260
7659	17509	27723	2.17	0.0E+00	AV132349.1	EST_HUMAN	AU3240-NT2R3 Homo sapiens cDNA clone NT2R3-3004260
7659	17509	27734	7.73	0.0E+00	BE740490.1	EST_HUMAN	001160555861 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3049383
7659	17509	27735	7.73	0.0E+00	BE740490.1	EST_HUMAN	001160555861 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3049383
7668	17510	27743	1.76	0.0E+00	BE740490.1	76552007 NT	Hom sapiens KIAA0345 gene product (KIAA0345), mRNA
7682	17832	27756	2.22	0.0E+00	AV132349.1	EST_HUMAN	AU132349 NT2R3 Homo sapiens cDNA clone NT2R3-3004260
7683	17833	27757	1.86	0.0E+00	AF162308.1	NT	Hom sapiens protease inhibitor alpha 1 (serine protease inhibitor alpha 1) mRNA, complete cds
7701	17551	27776	2.72	0.0E+00	AF006220.1	NT	Hom sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
7701	17551	27777	2.72	0.0E+00	AF006220.1	NT	Hom sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
7708	17553	27784	1.36	0.0E+00	BE092808.1	EST_HUMAN	MR-F-IN0114-11600-101-004 TN0114 Homo sapiens cDNA clone IMAGE:3137978
7720	17570	27795	2.44	0.0E+00	BE092808.1	EST_HUMAN	60116522771 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3137978
7728	17578	27800	1.74	0.0E+00	NW286298.1	EST_HUMAN	KT7261-1 NC_1 CAP_01 Homo sapiens cDNA clone IMAGE:20969973 similar to gbx2X152_cds1
7736	17585	27810	1.91	0.0E+00	Y1427225 NT	EST_HUMAN	LACTATE DEHYDROGENASE N CHAIN (HUMAN).
7753	17903	27825	5.98	0.0E+00	AU143873	EST_HUMAN	Hom sapiens Chordid-1-gash1 syndrome 1 (CHS1), mRNA
							AU143873-798A11 Homo sapiens cDNA clone Y798A1002307

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7753	17603	27827	5.98	0.0E+00 A072498.1	EST_HUMAN	AU14673 Y78AA1 Homo sapiens cDNA clone Y78AA1 002207 5'	
7756	17606	27830	7.52	0.0E+00 A072498.1	NT	Homo sapiens killer cell inhibitor receptor gene, exons 2, 3, and 4	
7756	17606	27831	2.48	0.0E+00	1142 001 NT	Homo sapiens HEF-Bla Protein (HEF), mRNA	
7758	17608	27831	2.46	0.0E+00	1142 001 NT	Homo sapiens HEF-Bla Protein (HEF), mRNA	
7755	17635	27833	2.96	0.0E+00 A0730637.1	EST_HUMAN	AU136305 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'	
7755	17635	27838	2.96	0.0E+00 A0730637.1	EST_HUMAN	AU136305 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'	
7755	17645	27839	2.13	0.0E+00 A298544.1	NT	Homo sapiens paraffin RANE27 gene for RNP27/morpho7 and partial 2Nf143 gene	
7755	17645	27840	2.13	0.0E+00 A298544.1	NT	Homo sapiens paraffin RANE27 gene for RNP27/morpho7 and partial 2Nf143 gene	
7804	17854	27862	4.01	0.0E+00 AA1196387.1	EST_HUMAN	250 711 1 Sources, pigment, uterus, NIH3T3, Homo sapiens cDNA clone IMAGE5033455	
7823	17873	27875	1.17	0.0E+00 AA131248.1	EST_HUMAN	231 610 1 Sources, placenta, uterus, NIH3T3, Homo sapiens cDNA clone IMAGE5033445	
7842	17892	27876	1.17	0.0E+00 AA131248.1	EST_HUMAN	231 610 1 Sources, placenta, uterus, NIH3T3, Homo sapiens cDNA clone IMAGE5033445	
7842	17892	27877	1.46	0.0E+00 AF073080.1	NT	Homo sapiens KIF4A/KIF4B mRNA, complete cds	
7865	17715	27879	3.45	0.0E+00 BE730772.1	EST_HUMAN	60 15707575 NIH3T3, Homo sapiens cDNA clone IMAGE33846403 5'	
7865	17715	27880	3.45	0.0E+00 BE730772.1	EST_HUMAN	60 15707575 NIH3T3, Homo sapiens cDNA clone IMAGE33846403 5'	
7892	17747	27885	1.24	0.0E+00	11860151 NT	Homo sapiens hypothetical C2d12 zinc finger protein P22504 (J22504), mRNA	
7897	17747	27887	1.84	0.0E+00 AB029580.1	NT	Homo sapiens mRNA for actin binding protein ABP260, complete cds	
7903	17753	27891	5.16	0.0E+00 AB029580.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds	
7903	17753	27892	5.16	0.0E+00 AB029580.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds	
7904	17754	27893	3.27	0.0E+00 AA194770.1	EST_HUMAN	240 611 1 Striatal muscle 83/720, Homo sapiens cDNA clone IMAGE628965 5' similar to TRG407097	
7905	17755	27894	5.43	0.0E+00 BE740331.1	EST_HUMAN	G407097_185kD PROTEIN;	
7905	17755	27895	5.43	0.0E+00 BE740331.1	EST_HUMAN	G02307045F1 NC_024816 Homo sapiens cDNA clone IMAGE4184639 5'	
7940	17783	28050	1.37	0.0E+00 T00787.1	EST_HUMAN	F02344 Fetal brain, Striatal, Homo sapiens cDNA clone IMAGE4184639 5'	
7972	17822	28055	2.35	0.0E+00 BE740318.1	EST_HUMAN	na156172 X Sources, NS,-FB, gnr, OT, P, ST Homo sapiens cDNA clone MAF265271 3'	
7973	17823	28055	2.05	0.0E+00 AV654765.1	EST_HUMAN	AV654765 NC_024816 Homo sapiens cDNA clone GL002207 3'	
7982	17832	28072	3.55	0.0E+00 KW517090.1	EST_HUMAN	KW574011 NC_024816 Homo sapiens cDNA clone IMAGE2607401 3' similar to gb M85090 MOESIN (HUMAN)	
7984	17834	28074	6.06	0.0E+00 BE546233.1	EST_HUMAN	G01075761 NC_024816 Homo sapiens cDNA clone IMAGE3464703 5'	
8001	17851	28092	1.05	0.0E+00 BE781772.1	EST_HUMAN	60 1467419 NIH3T3, Homo sapiens cDNA clone IMAGE3870700 5'	
8008	17858	28101	2.23	0.0E+00 BE80720.1	EST_HUMAN	BE24-B107462-1 NC_024816 NIH3T3, Homo sapiens cDNA	
8015	17865	28102	2.23	0.0E+00 BE80720.1	EST_HUMAN	RC2-B107462-2 NC_024816 NIH3T3, Homo sapiens cDNA	
8015	17865	28111	1.68	0.0E+00 JE474215.1	EST_HUMAN	60 15735865 NIH3T3, Homo sapiens cDNA clone IMAGE3885198 5'	
8015	17865	28112	1.69	0.0E+00 JE474215.1	EST_HUMAN	60 15735865 NIH3T3, Homo sapiens cDNA clone IMAGE3885198 5'	
8032	17824	28170	2.33	0.0E+00 AV711075.1	EST_HUMAN	AV711075 Cu, Homo sapiens cDNA clone CuAAKG06 5'	

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8032 17024	28171	2.33	0.0E+00	AV1071075.1	EST_HUMAN	AV11071075.Gu Homo sapiens cDNA clone CluAK/G05 5'	
8034 17026		6.11	0.0E+00	AV10513785.1	EST_HUMAN	BC3_ST01074/2020000156-03510197_Homo sapiens cDNA EST/T06363/MAGE superfamilies, MAGE_Homo sapiens cDNA	
8040 17831	28170	6.13	0.0E+00	AV1050563.3	EST_HUMAN	EST/T06363/MAGE superfamilies, MAGE_Homo sapiens cDNA	
8051 17942	28191	2.5	0.0E+00	11451124.1NT	EST_HUMAN	Homo sapiens ATP-binding cassette, subfamily A (ABC1), member 3 (ABCA3), mRNA	
8051 17942	28192	2.5	0.0E+00	11451124.1NT	EST_HUMAN	Homo sapiens ATP-binding cassette, subfamily A (ABC1), member 3 (ABCA3), mRNA	
8054 17945	28195	1.99	0.0E+00	AV1057622.1	EST_HUMAN	Iwy1f00.1T Scores: DbaQgaae, colin NSP_F8_SW_OT_P1_P_S Homo sapiens cDNA clone IMAGE:2653065 5' similar to TR_00666_Qd6666_VDY,	
8055 17950	28200	1.92	0.0E+00	BTC25270.1	EST_HUMAN	TCAAP906717elliot acute myelogenous leukemia cell (FB5 M1) Baylor-HOSC project# TGA_Homo sapiens cDNA clone TCAAP906717	
8056 17961	28201	4.86	0.0E+00	AV1052299.1	EST_HUMAN	wb28e12.1T NCL_CGAP_Go3_Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element	
8060 17961		2.91	0.0E+00	AV1052299.1	EST_HUMAN	MSRP1_MSRP1 repetitive element;	
8065 17969	28209	2.91	0.0E+00	11545911.1NT	EST_HUMAN	MSRP1_MSRP1 repetitive element;	
8068 17969	28210	2.91	0.0E+00	11545911.1NT	EST_HUMAN	Homo sapiens NOD22 protein (NOD2), mRNA	
8078 17969		2.91	0.0E+00	11545911.1NT	EST_HUMAN	U-HIF-BLO-40m-4-UH1_NIH_MGC_37_Homo sapiens cDNA clone IMAGE:30359383 5'	
8081 17972	28221	2.01	0.0E+00	AV104785.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20786 (FLJ20786), mRNA	
8084 17975	28224	4.8	0.0E+00	11424829.1	EST_HUMAN	Homo sapiens hypothetical protein (secreted) receptor TE (HTRTE), mRNA	
8085 17976	28225	6.16	0.0E+00	4604536.1NT	EST_HUMAN	Homo sapiens 5-hydroxytryptamine (serotonin) receptor TE (HTRTE), mRNA	
8085 17976		6.16	0.0E+00	4604536.1NT	EST_HUMAN	wd2205.1T Scores: DbaQgaae, colin NSP_F8_SW_OT_P1_P_S Homo sapiens cDNA clone IMAGE:23217165 3'	
8086 17977	28227	2.73	0.0E+00	AV1091827.1	EST_HUMAN	wd1502034.2T NIH_MGC_71_Homo sapiens cDNA clone IMAGE:30908865 5'	
8089 17980	28231	3.04	0.0E+00	BE8682108.1	EST_HUMAN	601163452F1_NIH_MGC_72_Homo sapiens cDNA clone IMAGE:3090866 5'	
8093 17984	28233	10.56	0.0E+00	BE861650.1	EST_HUMAN	601163452F1_NIH_MGC_72_Homo sapiens cDNA clone IMAGE:3090866 5'	
8095 17986	28234	22.36	0.0E+00	BG2369.1	EST_HUMAN	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYPH2), mRNA	
8095 17986	28235	22.36	0.0E+00	BG2369.1	EST_HUMAN	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYPH2), mRNA	
8110 18000	28247	1.91	0.0E+00	BE0930304.1	EST_HUMAN	601164332F1_NIH_MGC_24_Homo sapiens cDNA clone IMAGE:3067343 5'	
8113 15448	28516	4.05	0.0E+00	AA108606.1	EST_HUMAN	zpb9b11.1T Stakeholder muscle 93/209_Homo sapiens cDNA clone IMAGE:3027933 5' similar to 6b/203740	
8134 18022	28399	4.69	0.0E+00	IE1070458.1	EST_HUMAN	MYO3IN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN)	
8143 18031	28377	6.8	0.0E+00	AV1077352.1	EST_HUMAN	6011588262E1_NIH_MGC_7_Homo sapiens cDNA clone IMAGE:3094316 5'	
8143 18031	28378	6.8	0.0E+00	AV1077352.1	EST_HUMAN	AV1727382_RTC_Homo sapiens cDNA clone HTCAQ10165 5'	
8156 18044	28206	17.96	0.0E+00	AV1061005.1	EST_HUMAN	xyo470.1X NCL_CGAP_Lym12_Homo sapiens cDNA clone IMAGE:2852229 3' similar to gbmA69854 4QS	
8161 18049	28301	2.17	0.0E+00	AV135741.1	EST_HUMAN	AU385741 PLACE1_Homo sapiens cDNA clone PLACE:1022794 5'	

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Probe Seq ID No:	Exon ID No:	ORF Seq ID No:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Too Hit Database Source	Top Hit Descriptor
8287	18166	28409	3.52	0.0E+001 BIET730363.1	EST_HUMAN	RCI+FT0134+70700-012.07 FT0134_Homo sapiens cDNA RCI+FT0134+70700-012.07 FT0134_Homo sapiens cDNA	
8287	18166	28410	3.52	0.0E+001 BIET730363.1	EST_HUMAN	RCI+FT0134+70700-012.07 FT0134_Homo sapiens cDNA RCI+FT0134+70700-012.07 FT0134_Homo sapiens cDNA	
8307	18164	28431	24.55	0.0E+001 AAT740282.1	EST_HUMAN	#452047_51 NCI_CGA_P_Kids_Homo sapiens cDNA clone IMAGE:1325412 & similar to consine element NSR1 repetitive element.	
8313	18150	28439	3.12	0.0E+001 AF0220305.1	EST_HUMAN	Homo sapiens signaling lymphocytic activation molecule (SLAM) gene, exon 2	
8326	18203	28452	149.55	0.0E+001 AAT50863.1	EST_HUMAN	CD56 gene Human heart (Nakamura) Homo sapiens cDNA clone IMAGE:3NHC4817	
8333	18210	28460	2.17	0.0E+001 AAT746575.1	EST_HUMAN	oab6601_17 NCI_CGA_P_Gb1_Homo sapiens cDNA clone IMAGE:309609 5'	
8333	18210	28461	2.17	0.0E+001 AAT746575.1	EST_HUMAN	oab6601_17 NCI_CGA_P_Gb1_Homo sapiens cDNA clone IMAGE:309609 5'	
8341	18218	28470	2.11	0.0E+001 M78446.1	EST_HUMAN	ES700686_Ear, Stratigraphy (catarract) Homo sapiens cDNA clone IMAGE:00028028	
8341	18218	28471	2.41	0.0E+001 M78446.1	EST_HUMAN	ES700686_Fetal brain, Stratigraphy (catarract) Homo sapiens cDNA clone IMAGE:00028028	
8344	18221	28472	1.52	0.0E+001 AAT76083.1	EST_HUMAN	GV2+FT0088-020800-285+007 HT0686_Homo sapiens cDNA	
8345	18222	28473	8.08	0.0E+001 AAT157608.1	EST_HUMAN	DKFZp461_12116 r_761 (synonym: hamy2) Homo sapiens cDNA clone DKK2p761_J2116 5'	
8357	18234	28482	10.53	0.0E+001 AAT168681.1	EST_HUMAN	AU116868_HMBA1_Homo sapiens cDNA clone HEI_HBA10004_24 5'	
8375	18232	28503	1.89	0.0E+001 BI095655.1	EST_HUMAN	LSAT010-2300000-143-A07 J70104_Homo sapiens cDNA	
8398	18237	28523	3.78	0.0E+001 BE182860.1	EST_HUMAN	PM407_0846-085900-002-E05 HT0686_Homo sapiens cDNA	
8395	18237	28524	3.78	0.0E+001 BE182860.1	EST_HUMAN	PM407_0846-085900-002-E05 HT0686_Homo sapiens cDNA	
8405	18281	28533	3.46	0.0E+001 BI8096423.1	EST_HUMAN	8014380022_F1 NIH MGIC_72_Homo sapiens cDNA clone IMAGE:1924142 5'	
8410	18285	28539	1.74	0.0E+001 AIV80307.1	EST_HUMAN	U-HB_BND_#00-024-U17 NIH MGIC_56_Homo sapiens cDNA clone IMAGE:3077719 5'	
8410	18285	28540	1.74	0.0E+001 AIV80307.1	EST_HUMAN	U-HB_BND_#00-024-U17 NIH MGIC_56_Homo sapiens cDNA clone IMAGE:3077719 5'	
8422	18316	28574	4	0.0E+001 BE1829765.1	EST_HUMAN	80144046/F1 NIH MGIC_72_Homo sapiens cDNA clone IMAGE:9525403 5'	
8443	18317	28575	1.96	0.0E+001 A1465645.1	EST_HUMAN	apeBg11_x1 Schlierenmannogoma_Homo sapiens cDNA clone IMAGE:19242804 3'	
8453	18317	28576	1.96	0.0E+001 A1465645.1	EST_HUMAN	apeBg11_x1 Schlierenmannogoma_Homo sapiens cDNA clone IMAGE:19242804 3'	
8465	18328	28587	68.73	0.0E+001 F00884.1	EST_HUMAN	HSB7/712 STRATAGENE Human skeletal muscle cDNA library, cat. #956215_Homo sapiens cDNA clone	
8466	18328	28588	88.73	0.0E+001 F00884.1	EST_HUMAN	HSB7/712 STRATAGENE Human skeletal muscle cDNA library, cat. #956216_Homo sapiens cDNA clone	
8466	18328	28589	88.73	0.0E+001 F00884.1	EST_HUMAN	HSB7/712 STRATAGENE Human skeletal muscle cDNA library, cat. #956216_Homo sapiens cDNA clone	
8480	18333	28618	3.68	0.0E+001 F00884.1	EST_HUMAN	HSB7/712 STRATAGENE Human skeletal muscle cDNA library, cat. #956216_Homo sapiens cDNA clone	
8481	18334	28619	4.54	0.0E+001 BI020681.1	EST_HUMAN	HSB7/712 STRATAGENE Human skeletal muscle cDNA library, cat. #956216_Homo sapiens cDNA clone	
8483	18336	28620	16	0.0E+001 AW1207734.1	EST_HUMAN	U-HB_BND_#00-024-U17 NIH MGIC_56_Homo sapiens cDNA clone IMAGE:1924143 5'	
8484	18337	28621	3.77	0.0E+001 AIV064975.1	EST_HUMAN	ROD-CT0380-210106-032+010 CT0380_Homo sapiens cDNA	
8484	18337	28622	3.77	0.0E+001 AIV064975.1	EST_HUMAN	ROD-CT0380-210106-032+010 CT0380_Homo sapiens cDNA	
8488	18361	28625	6.91	0.0E+001 AB018260.1	EST_HUMAN	Homo sapiens mRNA for KIAA0717 protein, partial cds	
8488	18361	28626	6.91	0.0E+001 AB018260.1	EST_HUMAN	Homo sapiens mRNA for KIAA0717 protein, partial cds	

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Probe SEQ ID NO.	Exon ORF ID NO.	Expression Signal	Most Similar BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8490	18393	28628	2.69	0.0E+00 BE/205848.1	EST HUMAN	bae40771 NH_ MGC_77 Homo sapiens cDNA clone IMAGE:23-23373 5' similar to TR-076022_076022_E1B-55KDA-ASSOCIATED PROTEIN.
8490	18393	28626	2.69	0.0E+00 BE/20846.1	EST HUMAN	bae40771 NH_ MGC_77 Homo sapiens cDNA clone IMAGE:23-23373 5' similar to TR-076022_076022_E1B-55KDA-ASSOCIATED PROTEIN.
8511	18393	28648	2.65	0.0E+00 BE/036857.1	EST HUMAN	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MHC4), mRNA
8511	18396	28651	2.01	0.0E+00 BE/036857.1	EST HUMAN	CY030061-1200091-Homo sapiens cDNA
8511	18390	28651	2.9	0.0E+00 BE/148078.1	EST HUMAN	RC3-H170240-040800-110-061-H70230_Homo sapiens cDNA
8511	18390	28654	2.9	0.0E+00 BE/148078.1	EST HUMAN	RC3-H170240-040800-110-061-H70230_Homo sapiens cDNA
8520	18398	28606	6.47	0.0E+00 AA/186805.1	EST HUMAN	MTS1H1 HEAVY CHAIN SKELETAL MUSCLE (HUMAN);#50117 Strategene nucleic acid-07206_Homo sapiens cDNA clone IMAGE:3085028 3'
8546	18418	28687	4.47	0.0E+00 BE/057878.1	EST HUMAN	UH-BB-sek-b-10-Q-U1.s1 NCI CGAP Sub8_Homo sapiens cDNA clone IMAGE:3085028 3'
8648	18418	28688	4.47	0.0E+00 BE/057878.1	EST HUMAN	UH-BB-sek-b-10-Q-U1.s1 NCI CGAP Sub8_Homo sapiens cDNA clone IMAGE:3085028 3'
8555	18423	28622	2.16	0.0E+00 AAU136570.1	EST HUMAN	AU135170 PLACE11_Homo sapiens cDNA clone PLAC1_001351 5'
8557	18427	28695	6.22	0.0E+00 BE/076401.1	EST HUMAN	60-1486828F_NH_MGC_88_Homo sapiens cDNA clone IMAGE:3886207 5'
8557	18427	28697	5.62	0.0E+00 BE/076401.1	EST HUMAN	60-1486828F_NH_MGC_88_Homo sapiens cDNA clone IMAGE:3886207 5'
8565	18435	28627	10.32	0.0E+00 BE/045581.1	EST HUMAN	601876300F_NH_MGC_56_Homo sapiens cDNA clone IMAGE:4069710 5'
8577	18445	28713	3.05	0.0E+00 ABG3773/1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
8577	18445	28714	3.05	0.0E+00 ABG3773/1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
8581	18449	28717	3.49	0.0E+00 BE/036737.1	NT	Homo sapiens ribosomal RNA-like (r13L2), mRNA
8693	18449	28718	3.49	0.0E+00 BE/036737.1	NT	Homo sapiens ribosomal RNA-like (r13L2), mRNA
8693	18449	28734	6.1	0.0E+00 BE/036965.1	NT	Homo sapiens eukaryotic translation initiation factor 5A (EF4) mRNA
8693	18470	28741	2.49	0.0E+00 BE/0578267.1	EST HUMAN	6021341-32F_NH_MGC_81_Homo sapiens cDNA clone IMAGE:2347177 5'
8693	18472	28744	5.44	0.0E+00 AW/23873.1	EST HUMAN	dmn040511 NH_ MGC_3_Homo sapiens cDNA clone IMAGE:2347177 5'
8693	18473	28750	120.05	0.0E+00 M50683.1	NT	Human gamma actin-like pseudogene, complete cds
8612	18479	28750	3.18	0.0E+00 AA/060068.1	EST HUMAN	wf26911.1X Scores: Diekroeff, colon, NH/HC Homo sapiens cDNA clone IMAGE:2351180 3' similar to
8612	18481	28752	3.64	0.0E+00 BB/036966.1	EST HUMAN	gb:MM777811_GAMMA-1 GHAN C RECOM (HUMAN);
8614	18481	28753	3.54	0.0E+00 BB/036966.1	EST HUMAN	601889623F_NH_MGC_17_Homo sapiens cDNA clone IMAGE:41235948 5'
8620	18496	28768	26.06	0.0E+00 BE/036966.1	EST HUMAN	601889623F_NH_MGC_17_Homo sapiens cDNA clone IMAGE:41235948 5'
8639	18504	28769	4.07	0.0E+00 BE/097057.1	EST HUMAN	601896050F_NH_MGC_72_Homo sapiens cDNA clone IMAGE:3924877 5'
8648	18512	28763	2.89	0.0E+00 BE/207686.1	EST HUMAN	Homo sapiens gelatin-like protein (GLP), mRNA
8650	18514	28764	2.24	0.0E+00 BE/207686.1	EST HUMAN	601861947F_NH_MGC_33_Homo sapiens cDNA clone IMAGE:4031715 5'
8661	18550	28833	4.61	0.0E+00 BE/00846.1	EST HUMAN	bae40771 NH_ MGC_7_Homo sapiens cDNA clone IMAGE:23-23373 5' similar to TR-076022_076022_E1B-55KDA-ASSOCIATED PROTEIN.

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 Single Exon Probes Expressed in Heart

Probe Seq ID No:	Exon Seq ID No:	ORF Seq ID No:	Expression Signal Value	Most Similar BLAST E Value	Top Hit No.	Top Hit Database Source	Top Hit Description
8661	18550	28934	4.61	0.0E+00 BE208846.1	EST HUMAN	bad4e7-y1 NIH MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR-070922 OT09022 EB-	
8663	18552	28936	3	0.0E+00 AW/175028.1	EST HUMAN	55kDa ASSOCIATED PROTEIN ;	
8666	18557		2.36	0.0E+00 AA589707.1	EST HUMAN	DV0-070225-101225 NIH MGC_7 Homo sapiens cDNA clone IMAGE:104342 similar to gb M65778 ALPHA-	
8669	18548	24915	1.00	0.0E+00 AA594854.1	EST HUMAN	ACTINOB_1 CTGSKETAL isoform (HUMAN);	
8670	18558	28942	7.41	0.0E+00 AW/327565.1	EST HUMAN	Wp0208-x1 NCI CGAP_1 Homo sapiens cDNA clone IMAGE:2464094-3	
8700	18518	28900	4.73	0.0E+00 BE/055661.1	EST HUMAN	ILS-HT073-002065-0077-65 HT073-002065-0077-65 HT073-011 Homo sapiens cDNA clone IMAGE:2446919 5'	
8712	18559	28912	4.74	0.0E+00 BE/055640.1	EST HUMAN	DKFZp434G178_1 ; 434 (synonym: the3) Homo sapiens cDNA clone DKFZp434G178_5'	
8712	18553	28913	4.74	0.0E+00 ALD/06540.1	EST HUMAN	DKFZp434G178_1 ; 434 (synonym: the3) Homo sapiens cDNA clone DKFZp434G178_3 similar to gb S37431 LAMININ RECEPTOR (HUMAN);	
8722	18559	28923	12.33	0.0E+00 A/02316.1	EST HUMAN	rat1c07-51 NCI CGAP_GSB1 Homo sapiens cDNA clone IMAGE:2274683 similar to TR-Q13686	
8724	18550	28953	4.18	0.0E+00 AA/70895.1	EST HUMAN	rat1c07-51 NCI CGAP_GSB1 Homo sapiens cDNA clone IMAGE:2274683 similar to TR-Q13688	
8724	18550	28944	4.18	0.0E+00 AA/70895.1	EST HUMAN	rat1c07-51 NKB1B HOMOLOG PROTEIN ;	
8728	18564	28965	2.33	0.0E+00 BE/05046.1	EST HUMAN	00/050/000/F1 NIH MGC_70 Homo sapiens cDNA clone IMAGE:3002026 5'	
8737	17886	28930	5.87	0.0E+00 BE/05047.1	EST HUMAN	R27H12-11 NOL CGAP_C11 Homo sapiens cDNA clone IMAGE:226679 3 similar to TR-Q00409 Q00409	
8772	18569	28973	2.78	0.0E+00 L39891.1	NT	Homo sapiens polycomb-like disease-associated protein (PRKD1) gene, complete cds	
8772	18569	28976	0	0.0E+00 L39891.1	NT	Homo sapiens polycomb-like disease-associated protein (PRKD1) gene, complete cds	
8784	18609	28895	4.02	0.0E+00 BE/05211.1	EST HUMAN	AU138211 PLACE: Homo sapiens cDNA clone PLAC21008277_5	
8787	18611	28602	1.91	0.0E+00 BE/05231.1	EST HUMAN	00/044/005871 NIH MGC_73 Homo sapiens cDNA clone IMAGE:3916270 5'	
8827	18640	28624	10.47	0.0E+00 BE/748899.1	EST HUMAN	00/057/210651 NIH MGC_56 Homo sapiens cDNA clone IMAGE:3839012 3'	
8827	18640	28625	10.47	0.0E+00 BE/748898.1	EST HUMAN	00/057/210651 NIH MGC_56 Homo sapiens cDNA clone IMAGE:3839012 3'	
8837	18650	28937	2.97	0.0E+00 AU/141682.1	EST HUMAN	AU441882 THRO_Homo sapiens cDNA clone THRC001398 5'	
8837	18650	28638	2.97	0.0E+00 AU/141682.1	EST HUMAN	00/057/210651 NIH CCGAP_Brca2_Homo sapiens cDNA clone IMAGE:3568225 3' similar to WPF-E53H10.2	
8840	18653	28941	2.35	0.0E+00 ANVO0022.1	EST HUMAN	CE1104 ZINC FINGER, COX2 TYPE ;	
8843	18674	28643	3.84	0.0E+00 BF002383.1	EST HUMAN	7R27H12-101 NCI CGAP_C01 gene product is cDNA clone IMAGE:3316600 3 similar to TR-Q13458 Q13458	
8881	18673	28602	3.19	0.0E+00 AV/337773.1	EST HUMAN	MR-A-ST0118-261089-012-203 S10/18 Homo sapiens cDNA	
8881	18673	28635	3.19	0.0E+00 AV/387773.1	EST HUMAN	MR-A-ST0118-261089-012-203 S10/18 Homo sapiens cDNA	
8878	18690	28923	2.57	0.0E+00	1445244-N	Homeo proteins KIAA0247 gene product (KIAA0247), mRNA	

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Probe Seq ID No.	Exon Seq ID No.	ORF Seq ID No.	Expression Signal Value	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8878	18694	28895	2.57	0.0E+00	11436244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
8883	18694	28897	6.52	0.0E+00	U38265S.1	NT	Human beta-prime-actinin (BAM22) gene, exon 5
8885	18696	28900	2.04	0.0E+00	B33792F1_NIH	EST_HUMAN	60/237691F1_NIH MGC_44 Homo sapiens cDNA clone IMAGE-3030923 5'
8885	18696	28900	2.04	0.0E+00	B33792F1_NIH	EST_HUMAN	60/237691F1_NIH MGC_44 Homo sapiens cDNA clone IMAGE-3030923 6'
8886	18272	28434	63.21	0.0E+00	A211608S.1	EST_HUMAN	2m580/11 Strategene muscle 63/209 Homo sapiens cDNA clone IMAGE-56522D3 5' similar to dbX03740
8890	18883	28005	4.08	0.0E+00	A7V50/430.1	EST_HUMAN	U-HF-BND0name-cd0-1d4U-1NH MGC_50 Homo sapiens cDNA clone IMAGE-3085217 5'
8902	18710	29005	3.23	0.0E+00	B27947S.1	EST_HUMAN	60/509568F1_NIH MGC_7 Homo sapiens cDNA clone IMAGE-3044708 5'
8903	18711	29006	37.63	0.0E+00	B27948S.1	EST_HUMAN	60/49782F1_NIH MGC_69 Homo sapiens cDNA clone IMAGE-304581220 5'
8904	18712	29007	2.53	0.0E+00	M00075.1	NT	Human von Willebrand factor pseudogene corresponding to exon 23 through 34
8915	18723	29014	6.35	0.0E+00	B40496S.1	EST_HUMAN	60/129493F1_NIH MGC_21 Homo sapiens cDNA clone IMAGE-30286544 5'
8916	18724	29015	1.93	0.0E+00	11427345	NT	Homo sapiens protein kinase, AMP-activated alpha-2 catalytic subunit (PRKAAC2), mRNA
8916	18724	29016	1.93	0.0E+00	11427345	NT	Homo sapiens protein kinase, AMP-activated alpha-2 catalytic subunit (PRKAAC2), mRNA
8916	18724	29017	1.93	0.0E+00	11427345	NT	Homo sapiens calcium channel alpha-2 subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8917	18725	29018	2.32	0.0E+00	A72238P1.1	NT	Homo sapiens calcium channel alpha-1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8917	18725	29019	2.32	0.0E+00	A72239P1.1	NT	Homo sapiens calcium channel alpha-1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8919	18727	29020	5.66	0.0E+00	B78104F1.1	EST_HUMAN	60/2156722F1_NIH MGC_33 Homo sapiens cDNA clone IMAGE-42869725 5'
8919	18727	29021	6.66	0.0E+00	B78104F1.1	EST_HUMAN	60/2156722F1_NIH MGC_33 Homo sapiens cDNA clone IMAGE-42869725 5'
8924	18732	29026	3.22	0.0E+00	B50393Z2.1	EST_HUMAN	60/1676337F1_NIH MGC_21 Homo sapiens cDNA clone IMAGE-3058625 5'
8923	18741	29034	6.15	0.0E+00	B73125S2.1	EST_HUMAN	60/11897524F1_NIH MGC_19 Homo sapiens cDNA clone IMAGE-422059 5'
8923	18741	29035	6.15	0.0E+00	B73125S2.1	EST_HUMAN	60/11897524F1_NIH MGC_19 Homo sapiens cDNA clone IMAGE-422059 5'
8924	18742	29036	3.02	0.0E+00	N57755.1	NT	Human lamtoro-immunoglobulin constant region complex (germline)
8924	18742	29037	3.02	0.0E+00	N57755.1	NT	Human lamtoro-immunoglobulin constant region complex (germline)
8904	18771	29062	1.98	0.0E+00	BF3029120.1	EST_HUMAN	60/1860534F1_NIH MGC_17 Homo sapiens cDNA clone IMAGE-431416 5'
8905	18771	29063	1.98	0.0E+00	BF3029120.1	EST_HUMAN	60/1860534F1_NIH MGC_17 Homo sapiens cDNA clone IMAGE-431416 5'
8905	18775	29063	31.56	0.0E+00	E0226175.1	EST_HUMAN	60/1774077F1_NIH MGC_17 Homo sapiens cDNA clone IMAGE-3032088 5'
8905	18775	29065	38.47	0.0E+00	7898965	NT	Homo sapiens myoH, heavy polypeptide 1, skeletal muscle, adult (MHC1), mRNA
8902	18786	29077	34.29	0.0E+00	119242711	NT	Homo sapiens myoH, heavy polypeptide 1, skeletal muscle, adult (MHC1), mRNA
8907	18792	29081	31.52	0.0E+00	F00854.1	EST_HUMAN	HSBT7/E22 STRATACENE Human skeletal muscle cDNA library, cat. #03215, Homo sapiens cDNA clone H7E12

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Probe Seq ID No.	Exon Seq ID No.	CRF Seq ID No.	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8687	19702	20082	31.62	0.0E+00	F00984.1	EST_HUMAN	HSB7/122 STRA10GENE Human skeletal muscle cDNA library, cat. #036215, Homo sapiens cDNA clone
9000	18903	20096	7.45	0.0E+00	UB4744.1	NT	Human Chediak-Higashi syndrome protein 1 short isoform (LYST), mRNA, complete cds
9002	18905	20098	62.9	0.0E+00	Z20985.1	NT	mRNA species of cardiac alpha-myosin heavy chain gene
9017	19747	24860	2.54	0.0E+00	BE31282.1	EST_HUMAN	BE11500238F1 (HMG-C-19) human single cDNA clone IMAGE:3963020 6
9020	19664	24865	2.87	0.0E+00	AL163462.1	NT	Human sapogenin cation-binding protein 21, segment 15, clone IMAGE:3963020 6
9033	18605	34.5	0.0E+00	AL190983.1	EST_HUMAN	70/2.1x Sarcosine, fetal, lung, NCI-19W, Homo sapiens cDNA clone IMAGE:1739221 3	
9043	18826	2.24	0.0E+00	AB011952.1	NT	Ornitho-sapogenins, gene for AF-3, complete cds	
9062	18943	2.2	0.0E+00	AL163246.2	NT	Human sapogenin cation-binding protein 21, segment 15, clone IMAGE:3963020 6	
9071	18919	2.73	0.0E+00	11417892.1	NT	Human gene encoding mitochondrial protein, mRNA	
9080	18864	5.48	0.0E+00	58920793.1	NT	Human sapogenin cation-binding protein 1 (ACP1), nuclear gene	
9123	19863	25066	1.63	0.0E+00	AF207098.1	NT	Human glutathione S-transferase theta 2 (GST-T2) and glutathione S-transferase theta 1 (GST-T1)
9133	19571	2.92	0.0E+00	AL041931.1	EST_HUMAN	[DK-ZB45402015]_J_434 (synonym: head5) [Homologous cDNA clone DK-ZF2p34KG819 5]	
9158	19711	3.07	0.0E+00	11418318.1	NT	Human sapogenins G-2 and S-phase expressed 4 (GSE4), mRNA	
9187	18910	4.39	0.0E+00	AL046854.1	EST_HUMAN	[DK-ZB4540218]_I_434 (synonym: head5) [Homologous cDNA clone DK-ZB4540218 5]	
9180	18810	2.36	0.0E+00	AB033487.1	EST_HUMAN	IL-BT036-271098-001 BT036 Homo sapiens cDNA	
9218	19732	1.3	0.0E+00	N54484.1	EST_HUMAN	yw0408_s1 Smae tell 10k spleen (NS) Homo sapiens cDNA clone IMAGE:2452223 similar to IL-BT036-271098-001 BT036 Homo sapiens cDNA	
9223	18952	3.36	0.0E+00	AF10656.1	NT	Human sapogenins adenylylcytidylate lyase gene, complete cds	
9226	10752	20501	3.21	0.0E+00	4507500.1	NT	Human sapogenins T-cell lymphoma invasion and metastasis 1 (TALM1) mRNA
9228	10752	20502	3.21	0.0E+00	4507500.1	NT	Human sapogenins T-cell lymphoma invasion and metastasis 1 (TALM1) mRNA
9246	19612		2.75	0.0E+00	10392587.1	NT	Human sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 (NFATC2), mRNA
9276	10477		2.7	0.0E+00	AF206528.1	NT	Human sapiens X-linked arthrodial epidermolysis bullosa 1 (LBB2) mRNA
9309	19412	25183	2.48	0.0E+00	11430450.1	NT	Human sapiens low density lipoprotein receptor-related protein 2 (LRP2) mRNA
9370	19554	25004	3.23	0.0E+00	AW590082.1	EST_HUMAN	[hg18]XNCL_CCGA2_G05 Homo sapiens cDNA clone IMAGE:2847234 3 similar to contains Alu repetitive element
9382	19695		1.51	0.0E+00	BE0600202.1	EST_HUMAN	[RCG-BT0711-26c300-011-005] BT0711 Homo sapiens cDNA
9426	19807		2.33	0.0E+00	AF068757.1	NT	Human sapiens somatostatin receptor subtype 3 (SS1T) gene, 5' flanking region and partial cds
9481	19800		1.56	0.0E+00	98354637	NT	Human endogenous retrovirus, complete genome
9498	19850		1.59	0.0E+00	AL20614.1	EST_HUMAN	an0944X1 Strategic sethio brain S111 Homo sapiens cDNA clone IMAGE:1884759 3
9559	19336		1.58	0.0E+00	AL080546.1	EST_HUMAN	CV-B105-020398-005 BT055 Homo sapiens cDNA

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO:	Expression Signal	Most Similar BLAST E Value	(Top) HR	Top Hit Assession No.	Top Hit Database Source	EST_HUMAN	Top Hit Descriptor
6540	18506	11841	21724	1.68	0.0E+00	BE439702/1	NT	HTM1-654 HTM1 Homo sapiens cDNA	
6551	11841	21725	1.98	0.0E+00	691/2457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0350). mRNA		
6551	11841	21725	1.98	0.0E+00	691/2457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0350). mRNA		
6571	19761	25267	2.33	0.0E+00	A70505/5.1	NT	Homo sapiens cation-5 (CAV-5) mRNA, complete cds		
6584	11561	21428	2.87	0.0E+00	H40132/1	EST_HUMAN	y09408.11 Scores best 3 Nib-Bat Homo sapiens cDNA clone IMAGE:1822465 similar to g3/M64069		
6584	11561	21427	2.87	0.0E+00	H40132/1	EST_HUMAN	y09408.11 Scores best 3 Nib-Bat Homo sapiens cDNA clone IMAGE:1822465 similar to g3/M64069		
6587	19719	3221	3.22	0.0E+00	D65056/1	NT	Human gamma-glycoprotein acetyltransferase (ACGP) pseudogene		
6589	19781	25244	3.69	0.0E+00	11416160/NT	NT	Homo sapiens thyroid autoantigen TGD (Tg antigen) (G22P1). mRNA		
6589	19781	25245	3.99	0.0E+00	11416189/NT	NT	Homo sapiens thyroid autoantigen TGD (Tg antigen) (G22P1). mRNA		
6598	18239	25254	5.21	0.0E+00	BE246760/1	EST_HUMAN	TCAP1/E468 Heparic pro-B cell acute lymphoblastic leukemia Daylor-HGSC project=TCBA_Homo sapiens cDNA clone TCBAF4466		
6602	18539	24828	1.44	0.0E+00	692/2930	NT	Homo sapiens hypothetical protein RLJ10497 (RLJ10497). mRNA		
6608	19249	2349	2.39	0.0E+00	11525291/NT	NT	Homo sapiens G protein-coupled receptor 24 (GPR24). mRNA		
6721	18092	24868	3.19	0.0E+00	48853/12	NT	Homo sapiens CST gene for carboxyle sulfotransfase, exon 1, 2, 3, 4, 5		
6734	18289	2231	2.21	0.0E+00	A80256/00.1	NT	Homo sapiens CST gene for carboxyle sulfotransfase, exon 1, 2, 3, 4, 5		
6778	19231	26523	1.5	0.0E+00	68587/24	NT	Homo sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF1). mRNA		
6784	19737	2179	0.0E+00	AL103246/2	NT	Homo sapiens chromosome 21 segment 1 (S21C06)			
6800	19546	20354	1.41	0.0E+00	68609/8	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2). mRNA		
6878	18344	213	0.0E+00	78570/20	NT	Homo sapiens DKFzp434P211 protein (DKFzP434P211). mRNA			
9013	19388	25177	2.42	0.0E+00	8557/287	NT	Homo sapiens period Diapause1 homolog (PFE63). mRNA		
9038	19407	1.51	0.0E+00	X6747/1	NT	Human endogenous retrovirus p11-1 (HERV10)			
9046	19021	1.29	0.0E+00	114248/1	NT	Homo sapiens oxidized recycled (OXR). mRNA			
9055	18591	1.96	0.0E+00	BE17744/1	EST_HUMAN	RC1-1-T0695-200406-0724-12 HT0686 Homo sapiens cDNA			
9071	19451	1.28	0.0E+00	AL048611/1	EST_HUMAN	DKZ2-64105.8.1T_484 (synonym: hse3) Homo sapiens cDNA clone DKZ2-64105.8.1T_484			

CLAIMS

1. A spatially-addressable set of single exon nucleic-acid probes for measuring gene expression in a sample derived from human heart comprising a plurality single exon nucleic probes, said probes comprising any one of the nucleotide sequences set out in SEQ ID NOS: 1 - 9,980 or a complementary sequence, or a portion of such a sequence.
- 10 2. A spatially-addressable set of single exon nucleic acid probes as claimed in claim 1 wherein each of said plurality of probes is separately and addressably amplifiable.
- 15 3. A spatially-addressable set of single exon nucleic acid probes as claimed in claim 1 wherein each of said plurality of probes is separately and addressably isolatable from said plurality.
- 20 4. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 to 3 wherein said probes comprise any one of the nucleotide sequences set out in SEQ ID NOS.: 9,981 - 19,771.
- 25 5. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 to 4, wherein each of said plurality of probes is amplifiable using at least one common primer.
- 30 6. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 to 5 wherein the set comprises between 50 - 20,000 single exon nucleic acid probes.
- 35 7. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 to 6, wherein the

average length of the single exon nucleic acid probes is between 200 and 500 bp.

8. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 to 7, wherein at least 50% of said single exon nucleic acid probes lack prokaryotic and bacteriophage vector sequence.

9. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 to 8, wherein at least 50% of said single exon nucleic acid probes lack homopolymeric stretches of A or T.

10. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 - 9 characterised in that said set of probes is addressably disposed upon a substrate.

11. A spatially-addressable set of single exon nucleic acid probes as claimed in claim 10 wherein said substrate is selected from glass, amorphous silicon, crystalline silicon and plastic.

12. A microarray comprising a spatially addressable set of single exon nucleic acid probes as claimed in any of claims 1 - 11.

13. A single exon nucleic acid probe for measuring human gene expression in a sample derived from human heart comprising a nucleotide sequence as set out in any of SEQ ID NOS.: 1 - 9,980 or a complementary sequence or a fragment thereof wherein said probe hybridizes at high stringency to a nucleic acid molecule expressed in the human heart.

14. A single exon nucleic acid probe as claimed in claim 13 comprising a nucleotide sequence as set out in any of SEQ ID NOS.: 9,981 - 19,771 or a complementary sequence or a fragment thereof.

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15. A single exon nucleic acid probe for measuring human gene expression in a sample derived from human heart which is a nucleic acid molecule having a sequence encoding a peptide comprising a peptide sequence as set out in any of SEQ ID NOS.: 19,772 - 29,119, or a complementary sequence or a fragment thereof wherein said probe hybridizes at high stringency to a nucleic acid expressed in the human heart.

16. A single exon nucleic acid probe as claimed in any one of claims 13 to 15 wherein said single exon nucleic acid probe comprises between 15 and 25 contiguous nucleotides of said SEQ ID NO.

17. A single exon nucleic acid probe as claimed in any one of claims 13 to 15, wherein said probe is between 3 - 25 kb in length.

18. A single exon nucleic acid probe as claimed in any one of claims 13 - 17, wherein said probe is DNA, RNA or PNA.

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19. A single exon nucleic acid probe as claimed in any one of claims 13 - 18, wherein said probe is detectably labeled.

30 20. A single exon nucleic acid probe as claimed in any one of claims 13 - 19, wherein said probe lacks prokaryotic and bacteriophage vector sequence.

35 21. A single exon nucleic acid probe as claimed in any one of claims 13 - 20, wherein said probe lacks homopolymeric

stretches of A or T.

22. A method of measuring gene expression in a sample derived from human heart, comprising:

5 contacting the microarray of claim 12, with a first collection of detectably labeled nucleic acids, said first collection of nucleic acids derived from mRNA of human heart; and then
10 measuring the label detectably bound to each probe of said microarray.

23. A method of identifying exons in a eukaryotic genome, comprising:

15 algorithmically predicting at least one exon from genomic sequence of said eukaryote; and then
 detecting specific hybridization of detectably labeled nucleic acids to a single exon probe,
wherein said detectably labeled nucleic acids are derived from mRNA from the heart of said eukaryote, said probe is a
20 single exon probe having a fragment identical in sequence to, or complementary in sequence to, said predicted exon,
said probe is included within a microarray according to
claim 12, and said fragment is selectively hybridizable at
high stringency.

25 24. A method of assigning exons to a single gene,
comprising:

30 identifying a plurality of exons from genomic sequence according to the method of claim 23; and
 then
 measuring the expression of each of said exons in a plurality of tissues and/or cell types using hybridization to single exon microarrays having a probe with said exon,
35 wherein a common pattern of expression of said exons in

said plurality of tissues and/or cell types indicates that the exons should be assigned to a single gene.

25. A nucleic acid sequence as set out in any of SEQ ID
5 NOS: 1 - 19,771 which encodes a peptide.

26. A peptide encoded by a sequence as set out in any of SEQ ID Nos: 1 - 19,771.

10 27. A peptide comprising a sequence as set out in any of SEQ ID Nos: 19,772 - 29,119.

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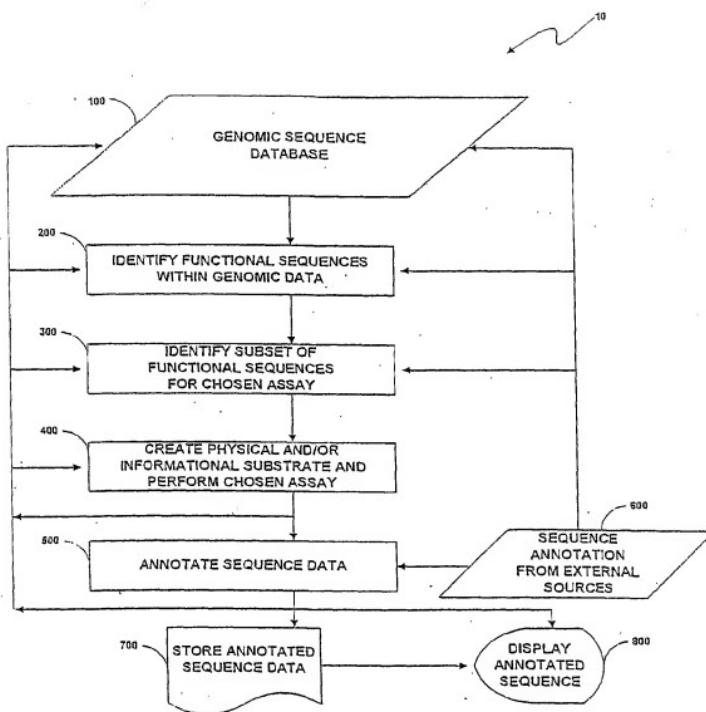


Fig. 1

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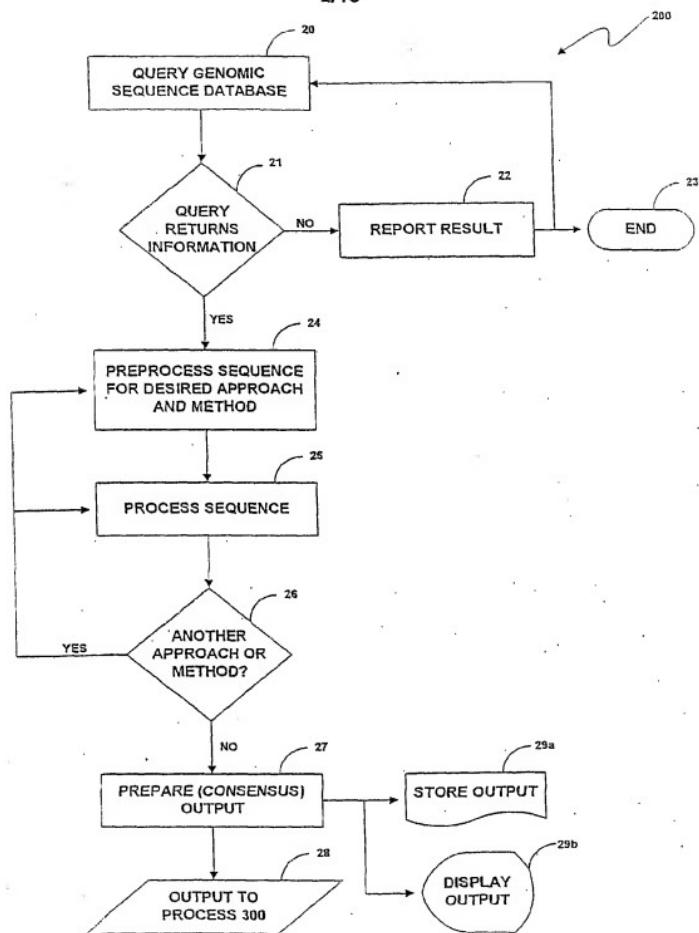


Fig. 2

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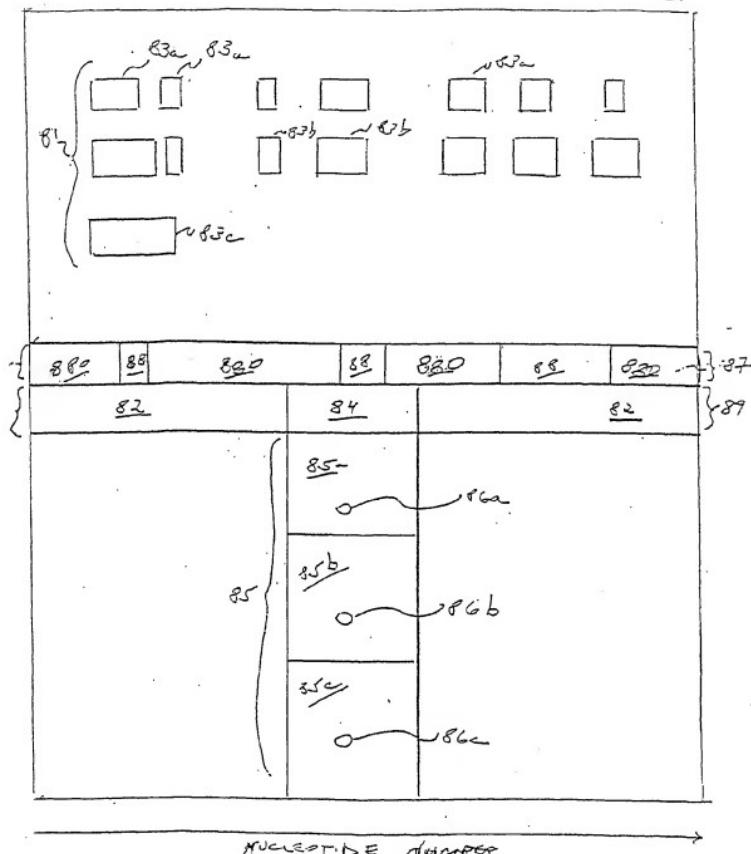


Fig. 3

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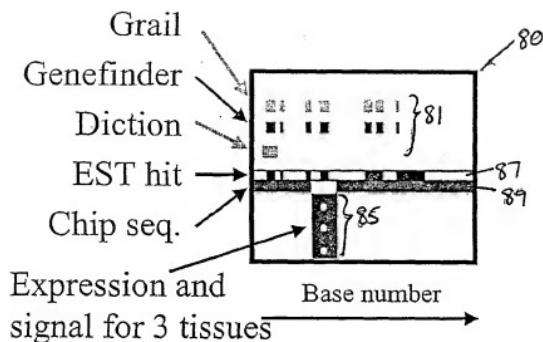


Fig. 4

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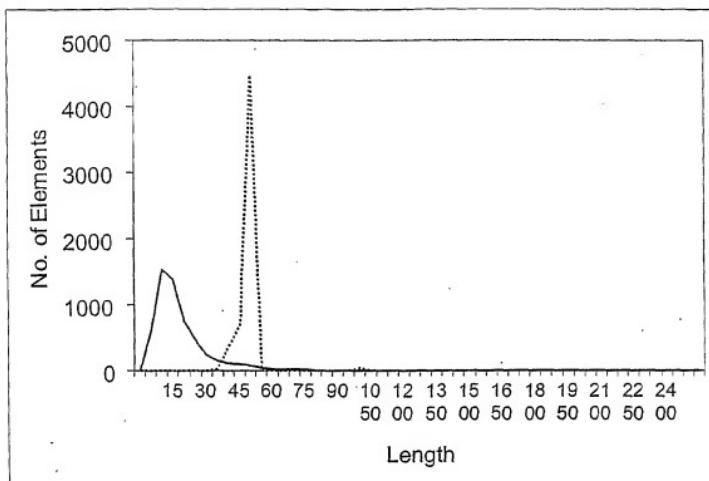


Fig. 5

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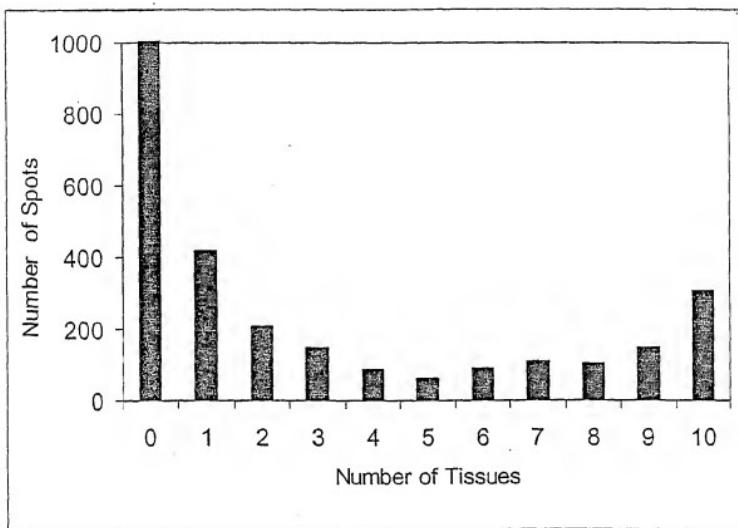


Fig. 6

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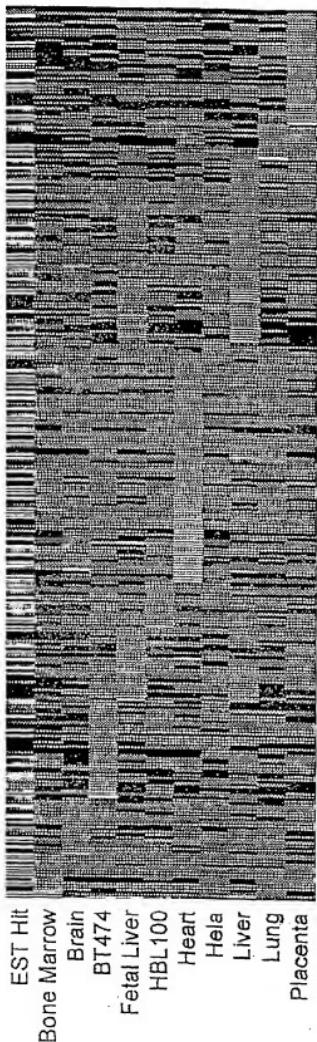


Fig. 7a

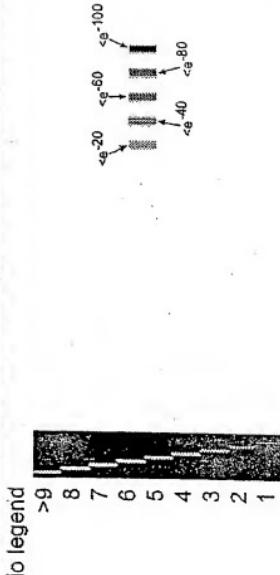


Fig. 7b

Fig. 7c

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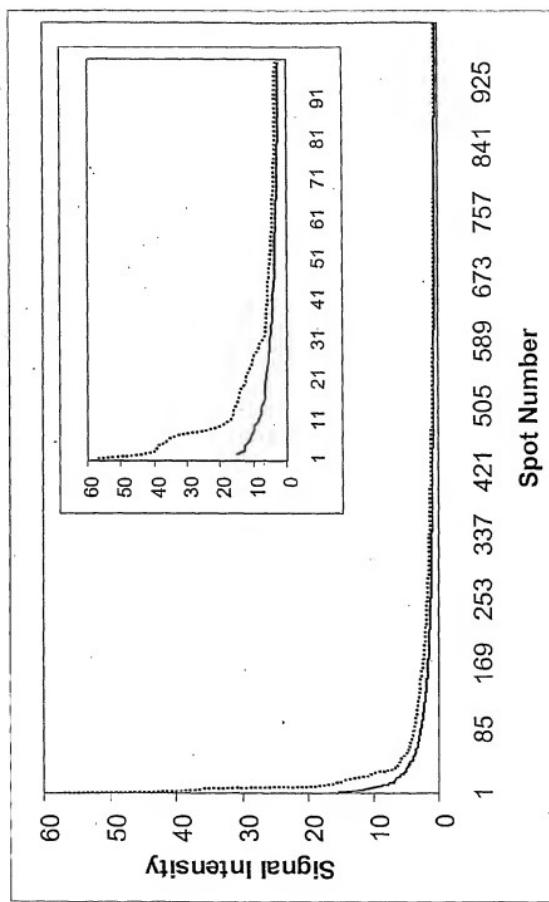


Fig. 8

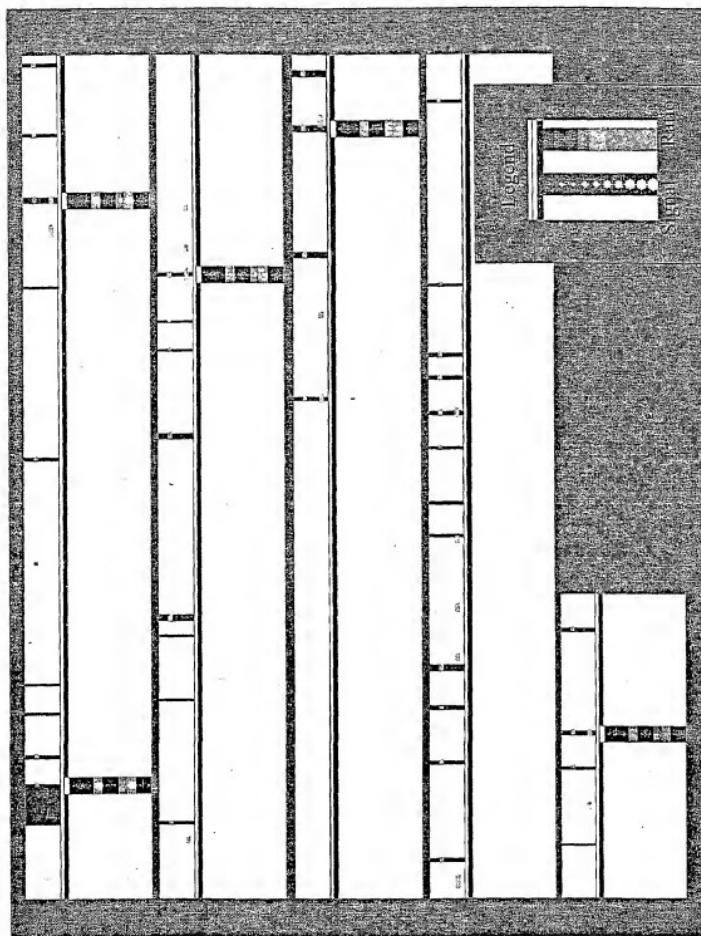


Fig. 9

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Fig. 10

